



HTC SWEDEN AB
www.htc-sweden.com



Service Manual

HTC 500, 650 & 800



Introduction

Contact HTC or your nearest reseller if you have questions or comments. Make sure to have the serial number of your machine available when you call, since all machines are registered and this helps us provide you with the best possible service. The serial number is located on the right-hand side of the chassis (seen from behind) and on the right-hand fixing lug. It is also found on the machine sign located on the electrical housing

It is possible to read the manufacture date of the machine from the serial number. In the example of 89704240, 8 represents the model - this is an HTC 800. The next six numbers are the date of manufacture. The last number is a sequence number and 0 indicates that this is the first machine built on this day.

Best wishes!

HTC Sweden AB

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Technical data HTC 500, HTC 650 and HTC 800

HTC 500



Model:	HTC 502E	HTC 504E	HTC 504S
Motor output	2.2 kW	4.0 kW	4.0 kW
Current:	10 Amp	16 Amp	16 Amp
Voltage:	220 V	3x380 V	3x380 V
Weight:	120 kg	140 kg	120 kg
Grinder diameter:	500 mm	500 mm	500 mm
Grinding pressure:	100 kg	120 kg	100 kg
Revolutions per minute:	300-1300 rpm	300-1300 rpm	750 rpm
Water tank (volume):	17 l	17 l	17 l
Grinding wheels:	3x220 mm	3x220 mm	3x220 mm

HTC 650



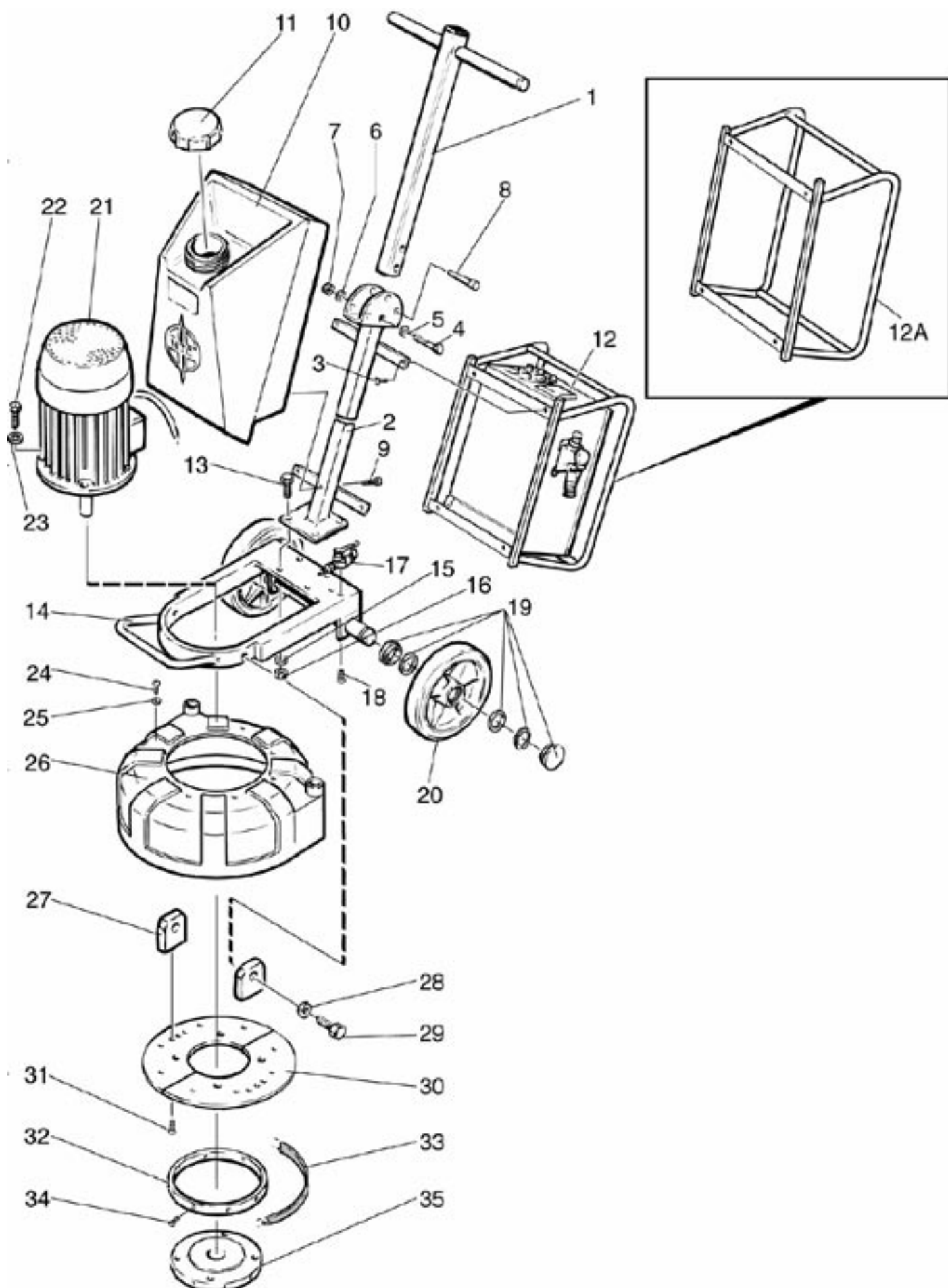
Model:	HTC 650E	HTC 650S
Motor output:	7.5 kW	5.5 kW
Current:	16 Amp	16 Amp
Voltage:	3x380 V	3x380 V
Weight:	240 kg	220 kg
Grinder diameter:	650 mm	650 mm
Grinding pressure:	210 kg	190 kg
Revolutions per minute:	300-1300 rpm	750 rpm
Water tank (volume):	40 l	40 l
Grinding wheels:	3x220 mm	3x220 mm

HTC 800

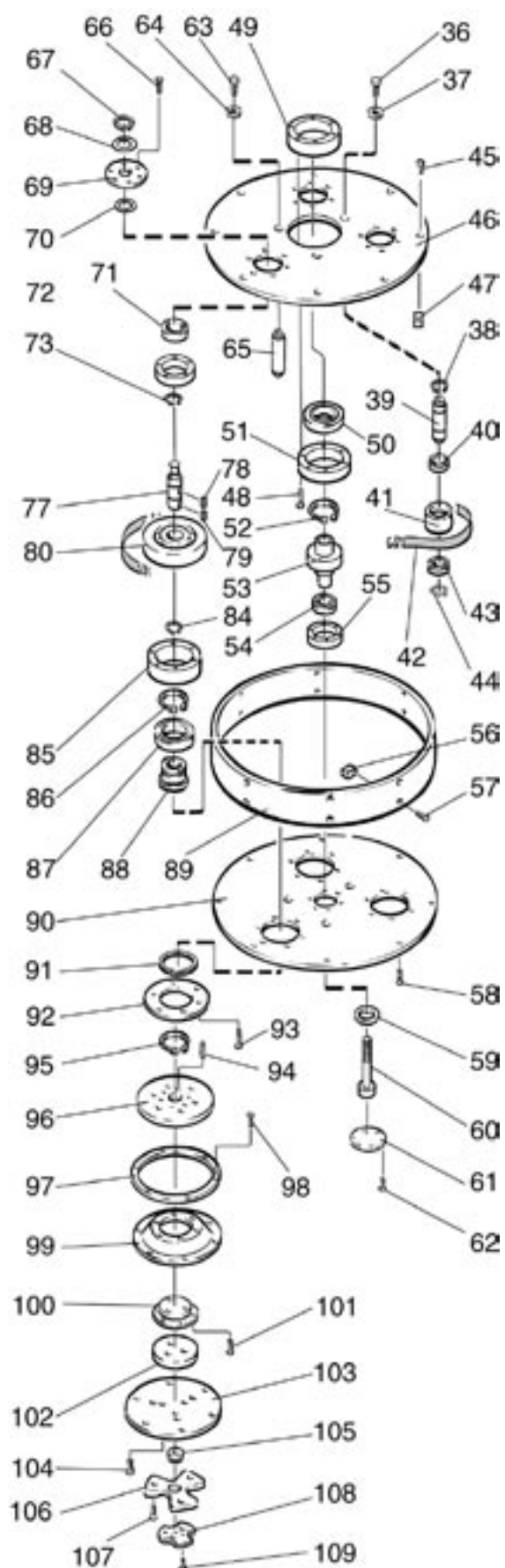


Model:	HTC 800HD	HTC 800E
Motor output:	11 kW	7.5 kW
Current:	25 Amp	16 Amp
Voltage:	3x380 V	3x380 V
Weight:	315-370 kg	280 kg
Grinder diameter:	800 mm	800 mm
Grinding pressure:	280-335 kg	240 kg
Revolutions per minute:	300-1300 rpm	300-1300 rpm
Water tank (volume):	40 l	40 l
Grinding wheels:	3x270 mm	3x270 mm

Exploded diagram, HTC 500



Exploded diagram, HTC 500



Parts list, HTC 500

The grinding machine's design may vary based on the year's model. Machines produced between 1992 and 1995, for example, have a drive system that is simple to upgrade.

Do not forget to quote the serial number when ordering spare parts. The serial number is located on the right-hand side of the chassis (seen from behind) and on the right-hand fixing lug. It can also be found on the nameplate.

Shown below is a parts list corresponding to the exploded diagram on the previous pages.

Pos.	Description	Part No.	Remarks
1	CHASSIS HTC 500 HANDLE	110616	
2	CHASSIS HTC 500 POST	110618	
3	SCREW M6S M8X25 GALV	310001	
4	SCREW M6S M12X85 GALV	310002	
5	WASHER BRB M12 GALV	310003	
6	WASHER BRB M12 GALV	310003	
7	NUT NYLOCK M12 GALV DIN985	310004	
8	SPRINT CHASSIS HTC 500	110001	
9	SCREW MC6S M8X10 8.8 GALV	310006	
10	WATER TANK HTC 500	110002	
11	COVER, WATER TANK	Discontinued	New tank without cover
12	FREQUENCY CONVERTER	11 different models	According to specification
12a	PROTECTIVE CAGE	110385	
13	SCREW M6S M10X35 GALV	310007	
14	CHASSIS HTC 500 BOTTOM	110617	
15	WASHER TBRB M10 GALV	310008	
16	NUT NYLOCK M10 GALV DIN985	310009	
17	WATER VALVE TO GRINDER	110007	
18	SCREW M6S M5X20 GALV	310010	
19	WHEEL FITTING KIT	110008	
20	WHEEL HTC 650 WKCP 2803 6553	110350	also 110381, wheel HTC 500
21	MOTOR	4 different models	
22	SCREW M6S M12X25 GALV	310011	
23	WASHER BRB M12 GALV	310003	
24	SCREW MC6S M6X10 8.8 GALV	310005	
25	WASHER BRB M6 GALV	310012	
26	COVER HTC 500 COMPLETE	110142	
27	FIXING LUG	110013	
28	WASHER BRB M12 GALV	310003	
29	SCREW M6S M10X35 GALV	310007	
30	SPLIT PLATE	110014	
31	SCREW MF6S M6X20 10.9 GALV	310013	
32	BELT RING	Discontinued	The motor plate and the belt ring are one piece
33	BELT, UPPER S-140 HTC 500	110016	
34	SCREW MFT-TT M6X16 8.8 GALV	310014	

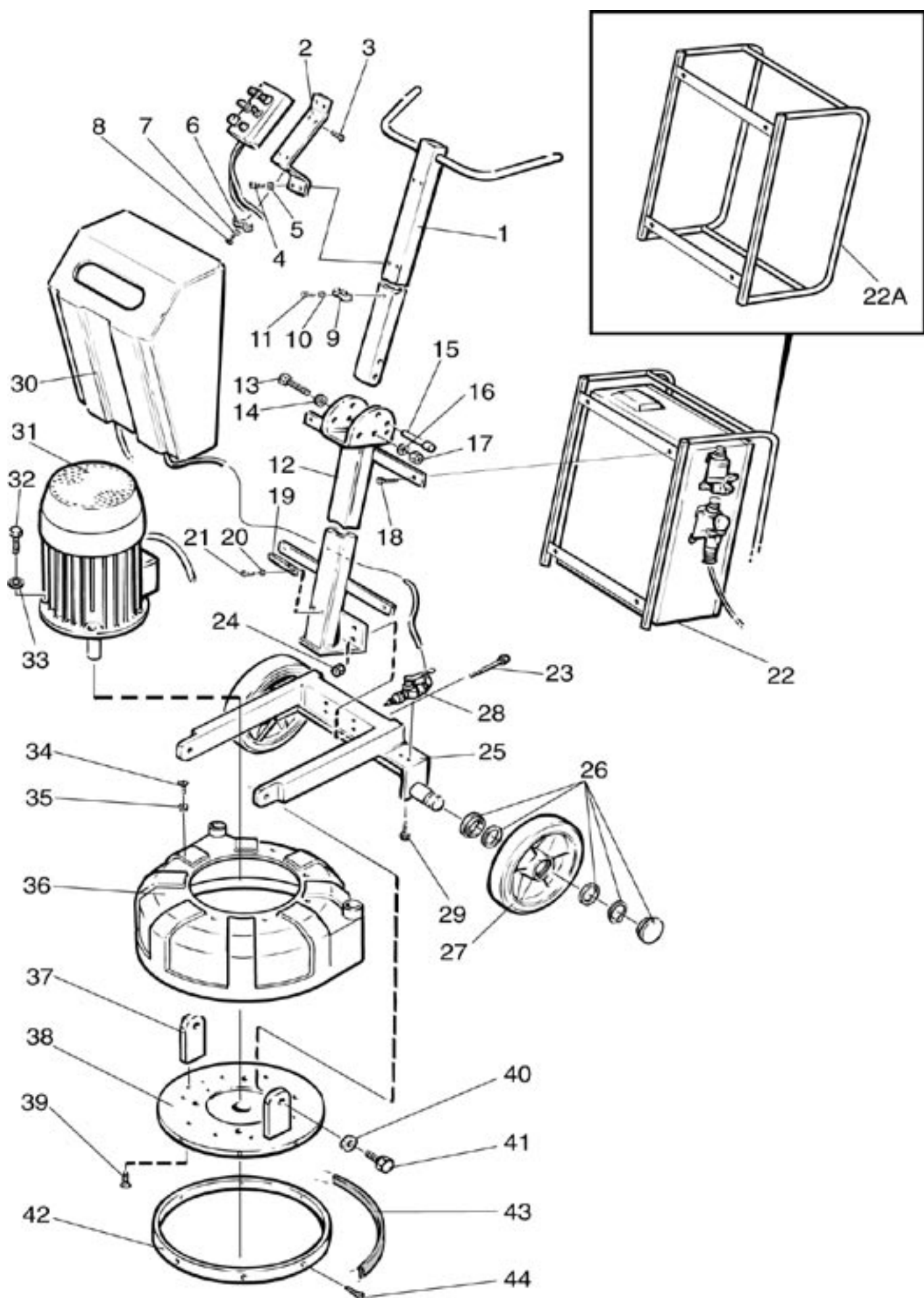
Parts list, HTC 500

Pos.	Description	Part No.	Remarks
35	MOTOR PLATE HTC 500	110017	
36	SCREW M6S M8X25 GALV	310001	
37	WASHER TBR SB M8 GALV	310015	
38	CIRCLIP SGA 20	310016	
39	SHAFT BELT TENSIONER	110018	
40	BALL BEARING 6005-2RS C3	110019	
41	TENSIONING WHEEL HTC 500	110020	
42	BELT, INNER S-250 HTC 500	110021	
43	BALL BEARING 6005-2RS C3	110019	
44	CIRCLIP SGA 20	310016	
45	SCREW MFT-TT M6X16 8.8 GALV	310014	
46	UPPER COVER HTC 500	110022	
47	FIXING BOSS, NON-ZINC	110023	
48	SCREW MFT-TT M6X25 8.8 GALV	310025	
49	BEARING CUP, TOP CENTRE HTC 500	110024	
50	BALL BEARING 6012-2RS C3	110026	
51	BEARING CUP, BOTTOM CENTRE 500	110027	
52	CIRCLIP SGA 60	310018	
53	CENTRE HUB	110030	
54	BALL BEARING 6205 2RS C3	110031	
55	BEARING CUP PULLEY UPPER HTC 500	110032	
56	FIXING BOSS, NON-ZINC	110023	
57	SCREW MFT-TT M6X16 8.8 GALV	310014	
58	SCREW MFT-TT M6X16 8.8 GALV	310014	
59	SPACER 6205	110033	
60	SCREW MC6S M10X60 12,9	310019	
61	COVER, CENTRE HUB HTC 500	110034	
62	SCREW MFT-TT M6X25 8.8 GALV	310025	
63	SCREW M6S M8X25 GALV	310001	
64	WASHER TBR SB M8 GALV	310015	
65	SHAFT BELT TENSIONER	110018	
66	SCREW MFT-TT M6X25 8.8 GALV	310025	
67	CIRCLIP SGA 20	Discontinued	Gamma ring is used instead
68	GAMMA RING RB 20X35X4	110564	
69	SHAFT COVER	110036	
70	SPACER 6205	110033	
71	BALL BEARING 6205 2RS C3	110031	
72	BEARING CUP PULLEY UPPER HTC 500	110032	
73	CIRCLIP SGA 25	310021	
74	-----		
75	-----		
76	-----		

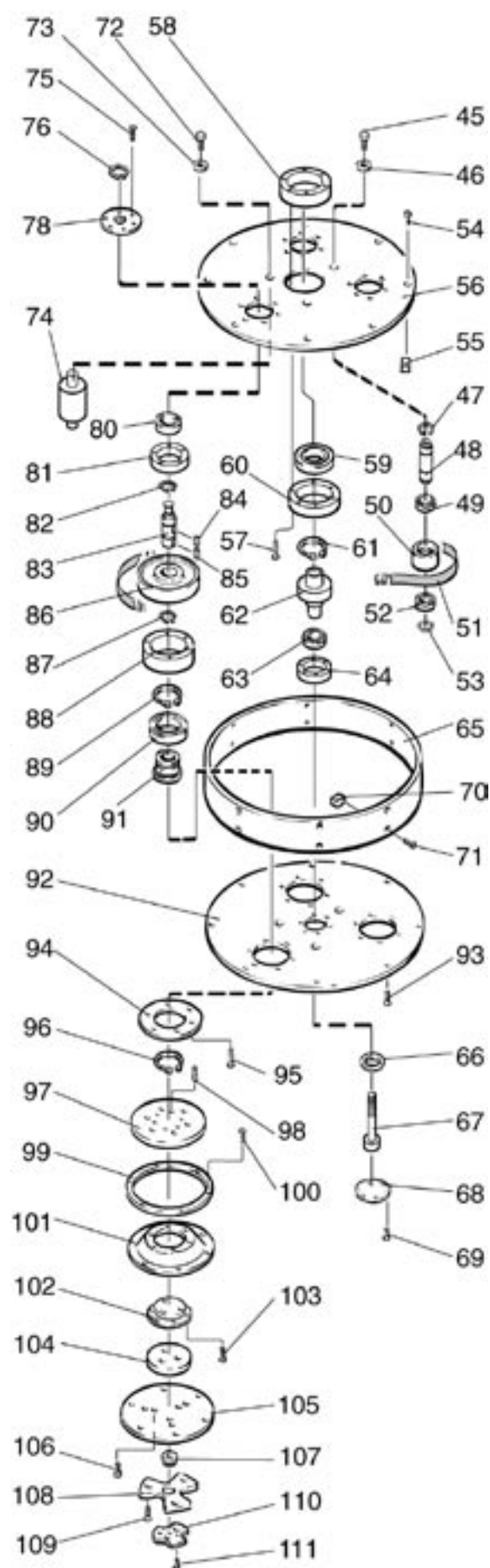
Parts list, HTC 500

Pos.	Description	Part No.	Remarks
77	SHAFT, PULLEY	110039	
78	WEDGE RK 8X7X25 H9	310023	
79	WEDGE RK 8X7X25 H9	310023	
80	PULLEY HTC 500 32X150	110040	
81	-----		
82	-----		
83	-----		
84	CIRCLIP SGA 25	310021	
85	BEARING CUP PULLEY LOWER HTC500	110041	
86	CIRCLIP SGA 50	310024	
87	BALL BEARING 6010 2RS C3	110044	
88	PULLEY HUB HTC 500	110045	
89	EDGING STRIP HTC 500	110046	
90	LOWER COVER HTC 500	110047	
91	SPACER 6010	110048	
92	HUB COVER HTC 500	110049	
93	SCREW MFT-TT M6X25 8.8 GALV	310025	
94	CYLINDER PIN CP 6X20 H8	310046	
95	CIRCLIP SGA 60	310018	
96	SGRINDING HOLDER UPPER HTC 500	110050	
97	HOLDER, POLYCORD, OUTER	110051	
98	SCREW MC6S M6X16 8.8 GALV	310082	
99	PAD, POLYCORD GREEN 168MM	110370	2 per grinding holder
100	HOLDER, POLYCORD INNER	110386	
101	SCREW MFT-TT M6X16 8.8 GALV	310014	
102	SPRING	110052	
103	GRINDING HOLDER, LOWER, HTC 500	110053	
104	SCREW	310027	
105	CROSS-PIECE PART 3	110054	
106	CROSS-PIECE PART 1 M6	110055	
107	SCREW MC6S M6X20 12.9	310027	
108	CROSS-PIECE PART 2	110056	
109	SCREW MF6S M5X8 GALV	310028	

Exploded diagram, HTC 650



Exploded diagram grinding holder, HTC 650



Parts list, HTC 650

Pos.	Description	Part No.	Remarks
1	CHASSIS HTC 650/800 HANDLE	110057	
2	CONSOLE CONTROL PANEL	110058	
3	SCREW RXS B10X16 GALV	310029	
4	SCREW MC6S M6X12 8.8 GALV	310030	
5	WASHER BRB M6 GALV	310012	
6	WIRING HOLDER (CLIP) JR12	110059	
7	WASHER BRB M6 GALV	310012	
8	SCREW MC6S M6X12 8.8 GALV	310030	
9	WIRING HOLDER (CLIP) JR12	110059	
10	WASHER BRB M6 GALV	310012	
11	SCREW MC6S M6X12 8.8 GALV	310030	
12	CHASSIS HTC 650/800 POST	110060	
13	SCREW M6S M16X120 GALV	310031	
14	WASHER BRB M16 GALV	310032	
15	SPRINT CHASSIS HTC 650/800	110061	
16	WASHER BRB M16 GALV	310032	
17	NUT NYLOCK M16 GALV DIN985	310033	
18	SCREW MF6S M8X25 GALV	310071	
19	TANK BRACKET	110062	
20	WASHER BRB M6 GALV	310012	
21	SCREW MC6S M6X12 8.8 GALV	310030	
22	FREQUENCY CONVERTER 7.5 kw		According to specification
22	SOFT START 5.5 kw		According to specification
22a	PROTECTIVE CAGE FREQUENCY CONVERTER	110158	
22a	PROTECTIVE CAGE SOFT START	110003	
23	SCREW M6S M12X65 GALV	310034	
24	NUT NYLOCK M12 GALV DIN985	310004	
25	CHASSIS HTC 650 BOTTOM	110643	
26	WHEEL FITTING KIT	110008	
27	WHEEL HTC 650 WKCP 2803 6553	110350	
28	WATER VALVE TO GRINDER	110007	
29	SCREW M6S M5X20 GALV	310010	
30	WATER TANK HTC 650/800	110069	
31	MOTOR 7.5 DPIG 132M-4 200/346	110226	
31	MOTOR 5.5KW DPIG132S-4,400/690	110368	
31	MOTOR 5.5KW DPIG132S-4 200/400	110312	
32	SCREW M6S M12X25 GALV	310011	
33	WASHER BRB M12 GALV	310003	
34	SCREW MC6S M6X25 12.9 GALV	310035	
35	WASHER BRB M6 GALV	310012	
36	COVER HTC 650 COMPLETE	110121	
37	FIXING LUG	110072	

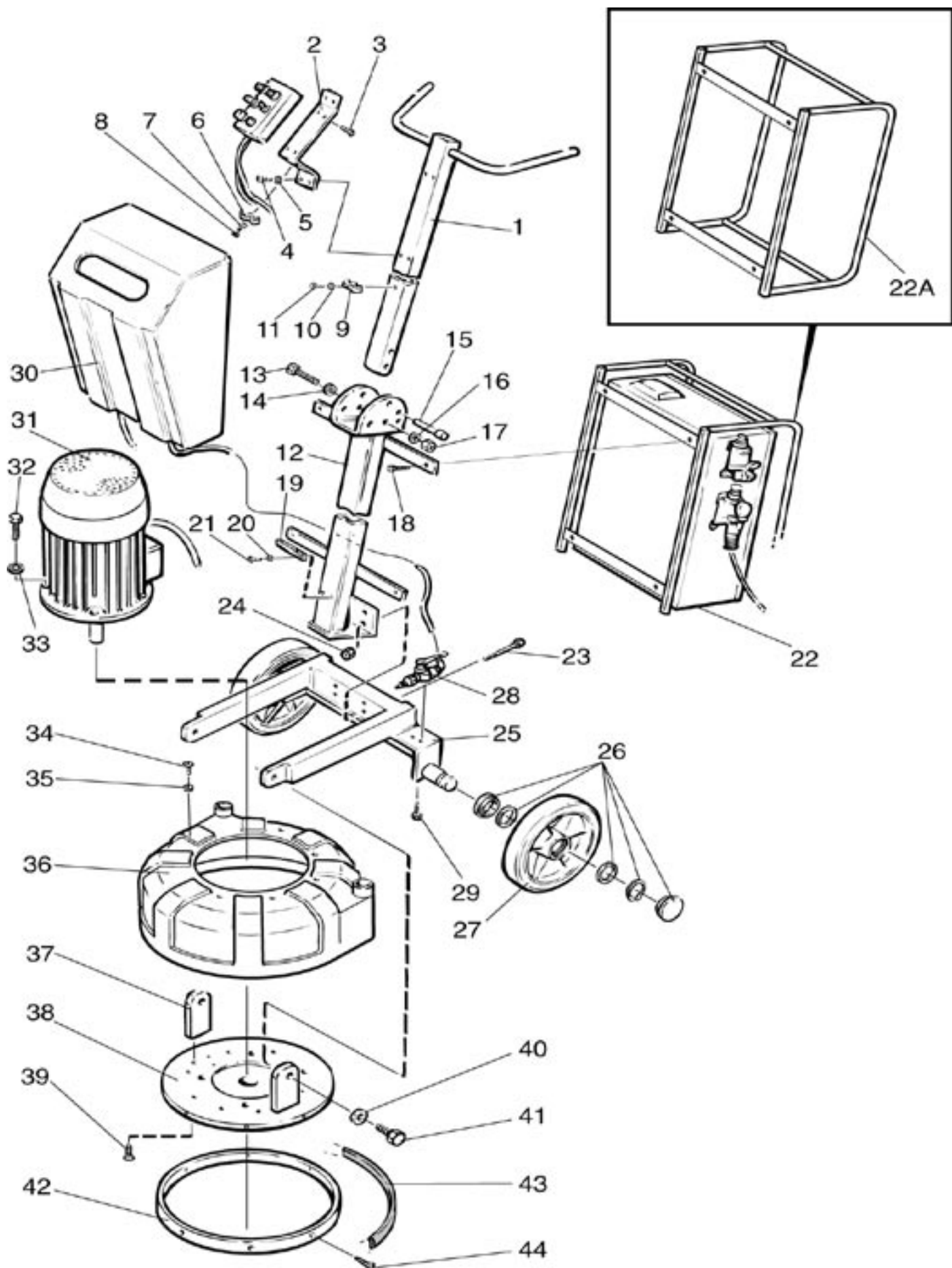
Parts list, HTC 650

Pos.	Description	Part No.	Remarks
38	MOTOR PLATE HTC 650	110073	
39	SCREW MC6S M8X25 12.9	310036	
40	WASHER BRB M12 GALV	310003	
41	SCREW M6S M12X45 GALV	310037	
42	BELT RING HTC 650	110074	
43	BELT, UPPER S-140 HTC 650	110075	
44	SCREW MFT-TT M6X16 8.8 GALV	310014	
45	SCREW M6S M10X25 GALV	310114	
46	WASHER TBRBS M10 GALV	310042	
47	CIRCLIP SGA 35	310038	
48	SHAFT BELT TENSIONER	110077	
49	BALL BEARING 6207 2RS C3	110078	
50	TENSIONING WHEEL HTC 650	110079	
51	BELT, INNER S-250 HTC 650	110080	
51	BELT, INNER S-250 HTC 650 SOFT START	110376	
52	BALL BEARING 6207 2RS C3	110078	
53	CIRCLIP SGA 35	310038	
54	SCREW MFT-TT M6X16 8.8 GALV	310014	
55	FIXING BOSS, NON-GALV	110023	
56	UPPER COVER HTC 650	110081	
57	SCREW MFT M6X30 8.8 GALV	310017	
58	BEARING CUP TOP, CENTRE HTC650	110082	
59	BALL BEARING 6214-2RS1	110083	
60	BEARING CUP, BOTTOM CENTRE 650	110084	
61	CIRCLIP SGA 70	310040	
62	CENTRE HUB	110085	
62	CENTRE HUB SOFT START	110159	
63	BALL BEARING 6207 2RS C3	110078	
64	BEARING CUP PULLEY UPPER HTC 650	110086	
65	EDGING STRIP HTC 650	110087	
66	SPACER 6207	110088	
67	SCREW MC6S M12X60 12,9	310041	
68	COVER, CENTRE HUB HTC 650/800	110089	
69	SCREW MFT-TT M6X25 8.8 GALV	310025	
70	FIXING BOSS, NON-ZINC	110023	
71	SCREW MFT-TT M6X16 8.8 GALV	310014	
72	SCREW M6S M10X25 GALV	310114	
73	WASHER TBRBS M10 GALV	310042	
74	COUNTERWEIGHT HTC 650/800	110090	
75	SCREW MFT-TT M6X25 8.8 GALV	310025	
76	CIRCLIPSGA 25	310021	
77	-----		
78	SHAFT COVER	110092	

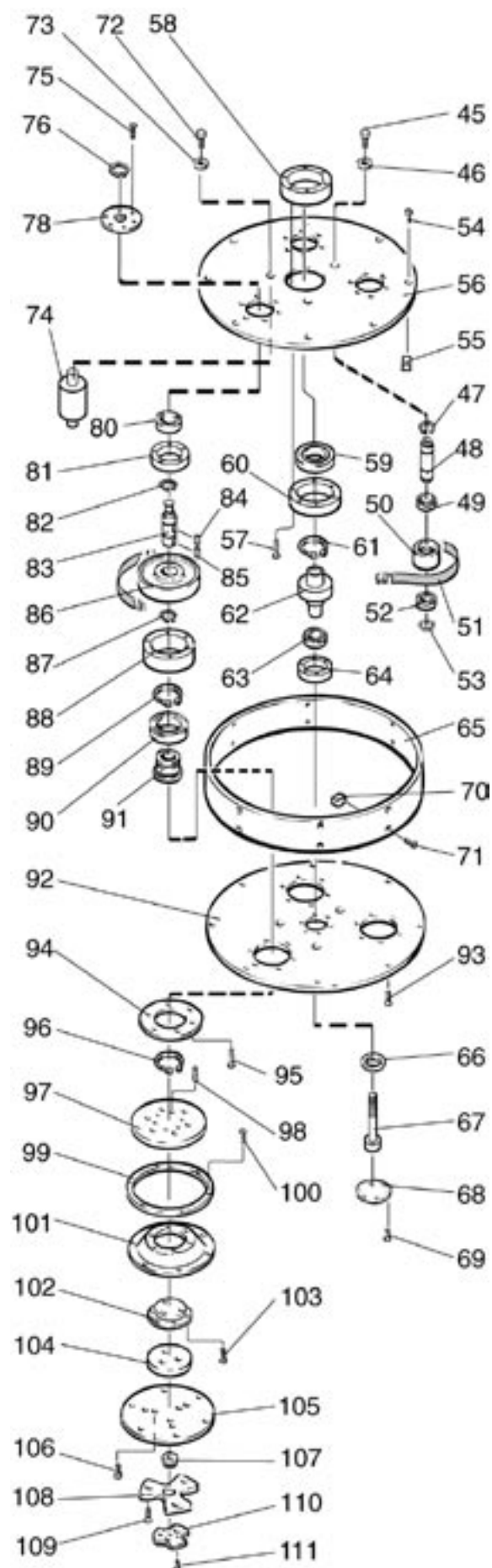
Parts list, HTC 650

Pos.	Description	Part No.	Remarks
79	-----		
80	BALL BEARING 6207 2RS C3	110078	
81	BEARING CUP PULLEY UPPER HTC 650	110086	
82	CIRCLIP SGA 40	310043	
83	SHAFT, PULLEY	110093	
84	WEDGE RK 12X8X40	310044	
85	WEDGE RK 12X8X30	310045	
86	PULLEY HTC 650 50X180	110118	
87	CIRCLIP SGA 40	310043	
88	BEARING CUP PULLEY LOWER HTC650	110094	
89	CIRCLIP SGA 60	310018	
90	BALL BEARING 6012 2RS C3	110026	
91	PULLEY HUB HTC 650	110095	
92	LOWER COVER HTC 650	110096	
93	SCREW MFT-TT M6X16 8.8 GALV	310014	
94	HUB COVER (PROCESSING) HTC 650(/800)	110097	
95	SCREW MFT M6X30 8.8 GALV	310017	
96	CIRCLIP SGA 70	310040	
97	GRINDING HOLDER UPPER HTC 650/800	110098	
98	CYLINDER PIN CP 6X20 H8	310046	
99	HOLDER, POLYCORD, OUTER	110099	
100	SCREW MC6S M6X16 8.8 GALV	310082	
101a	PAD, POLYCORD BLACK 184MM	110371	
101b	PAD, POLYCORD GREEN 184MM	110369	
101c	PAD, POLYCORD GREEN 184MM	110369	
102	HOLDER, POLYCORD INNER	110397	
103	SCREW MFT-TT M6X16 8.8 GALV	310014	
104	SPRING	110100	
105	GRINDING HOLDER, LOWER, HTC 650	110101	
106	SCREW MC6S M6X20 12.9	310027	
107	CROSS-PIECE PART 3	110054	
108	CROSS-PIECE PART 1 M8	110257	
109	SCREW MFT M8X16 8.8 GALV	310070	
110	CROSS-PIECE PART 2	110056	
111	SCREW MF6S M5X8 GALV	310028	

Exploded diagram HTC 800 (models built before year 2000)



Exploded diagram HTC 800 (models built before year 2000)



Parts list HTC 800 (models built before year 2000)

Pos.	Description	Art.No:	Remarks
1	CHASSIS HTC 650/800 HANDLE	110057	
2	CONSOLE CONTROL PANEL	110058	
3	SCREW RXS B10X16 GALV	310029	
4	SCREW MC6S M6X12 8.8 GALV	310030	
5	WASHER BRB M6 GALV	310012	
6	WIRING HOLDER (CLIP) JR12	110059	
7	WASHER BRB M6 GALV	310012	
8	SCREW MC6S M6X12 8.8 GALV	310030	
9	WIRING HOLDER (CLIP) JR12	110059	
10	WASHER BRB M6 GALV	310012	
11	SCREW MC6S M6X12 8.8 GALV	310030	
12	CHASSIS HTC 650/800 POST	110060	
13	SCREW M6S M16X120 GALV	310031	
14	WASHER BRB M16 GALV	310032	
15	SPRINT CHASSIS HTC 650/800	110061	
16	WASHER BRB M16 GALV	310032	
17	NUT NYLOCK M16 GALV DIN985	310033	
18	SCREW MF6S M8X25 GALV	310071	
19	TANK BRACKET	110062	
20	WASHER BRB M6 GALV	310012	
21	SCREW MC6S M6X12 8.8 GALV	310030	
22	FREQUENCY CONVERTER 7.5 kw		According to specification
22a	PROTECTIVE CAGE	110158	
23	SCREW M6S M12X65 GALV	310034	
24	NUT NYLOCK M12 GALV DIN985	310004	
25	CHASSIS HTC 800 BOTTOM	110619	
26	WHEEL FITTING KIT	110008	Only for use with solid wheels
27	WHEEL HTC 800	110382	More alternatives available
28	WATER VALVE TO GRINDER	110007	
29	SCREW M6S M5X20 GALV	310010	
30	WATER TANK HTC 650/800	110069	
31	MOTOR 7.5 DPIG 132M-4 200/346	110226	
32	SCREW M6S M12X25 GALV	310011	
33	WASHER BRB M12 GALV	310003	
34	SCREW MC6S M6X25 12.9 GALV	310035	
35	WASHER BRB M6 GALV	310012	
36	COVER HTC 800 COMPLETE NEW RIGHT	110228	More alternatives available
37	FIXING LUG	110072	
38	MOTOR PLATE HTC 800	110104	
39	SCREW MC6S M8X25 12.9	310036	
40	WASHER BRB M12 GALV	310003	

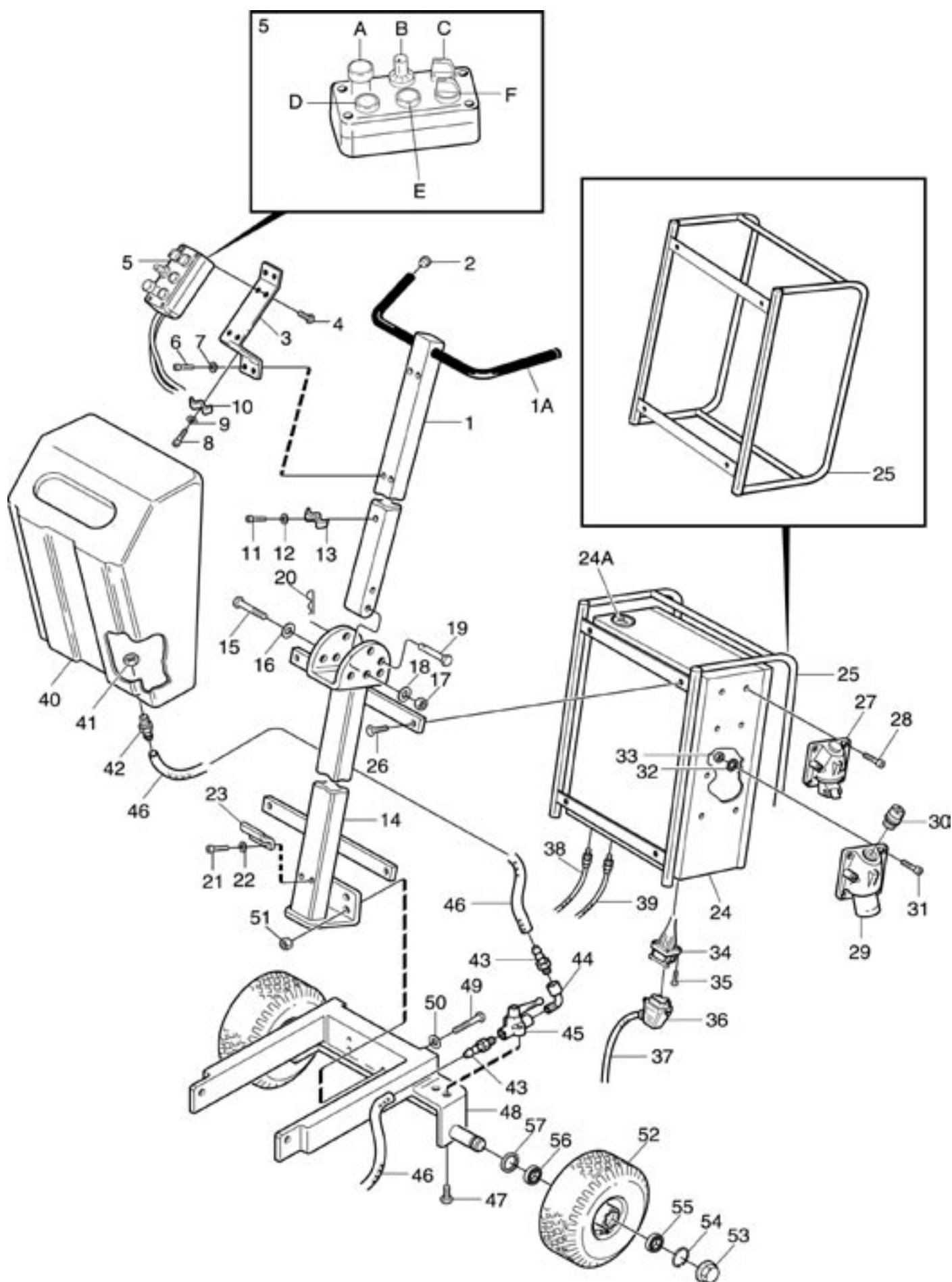
Parts list HTC 800 (models built before year 2000)

Pos.	Description	Art.No:	Remarks
41	SCREW M6S M12X45 GALV	310037	
42	BELT RING HTC 800	110105	
43	BELT, UPPER S-140 HTC 800	110106	
44	SCREW MFT-TT M6X16 8.8 GALV	310014	
45	SCREW M6S M10X25 GALV	310114	
46	WASHER TBR SB M10 GALV	310042	
47	CIRCLIP SGA 35	310038	
48	SHAFT BELT TENSIONER	110077	
49	BALL BEARING 6207 2RS C3	110078	
50	TENSIONING WHEEL HTC 650	110079	
51	BELT, INNER, HTC 800 OLD MODEL	110107	
52	BALL BEARING 6207 2RS C3	110078	
53	CIRCLIP SGA 35	310038	
54	SCREW MFT-TT M6X16 8.8 GALV	310014	
55	FIXING BOSS, NON-ZINC	110023	
56	UPPER COVER HTC 800	110108	
57	SCREW MFT M6X30 8.8 GALV	310017	
58	BEARING CUP TOP, CENTRE HTC650	110082	
59	BALL BEARING 6214-2RS1	110083	
60	BEARING CUP, BOTTOM CENTRE 650	110084	
61	CIRCLIP SGA 70	310040	
62	CENTRE HUB	110085	
63	BALL BEARING 6207 2RS C3	110078	
64	BEARING CUP PULLEY UPPER HTC 650	110086	
65	EDGING STRIP HTC 650	110087	
66	SPACER 6207	110088	
67	SCREW MC6S M12X60 12.9	310041	
68	COVER, CENTRE HUB HTC 650/800	110089	
69	SCREW MFT-TT M6X25 8.8 GALV	310025	
70	FIXING BOSS, NON-ZINC	110023	
71	SCREW MFT-TT M6X16 8.8 GALV	310014	
72	SCREW M6S M10X25 GALV	310114	
73	WASHER TBR SB M10 GALV	310042	
74	COUNTERWEIGHT HTC 650/800	110090	
75	SCREW MFT-TT M6X25 8.8 GALV	310025	
76	CIRCLIP SGA 25	310021	
77	-----		
78	SHAFT COVER	110092	
79	-----		
80	BALL BEARING 6207 2RS C3	110078	
81	BEARING CUP PULLEY UPPER HTC 650	110086	
82	CIRCLIP SGA 40	310043	
83	SHAFT, PULLEY	110093	

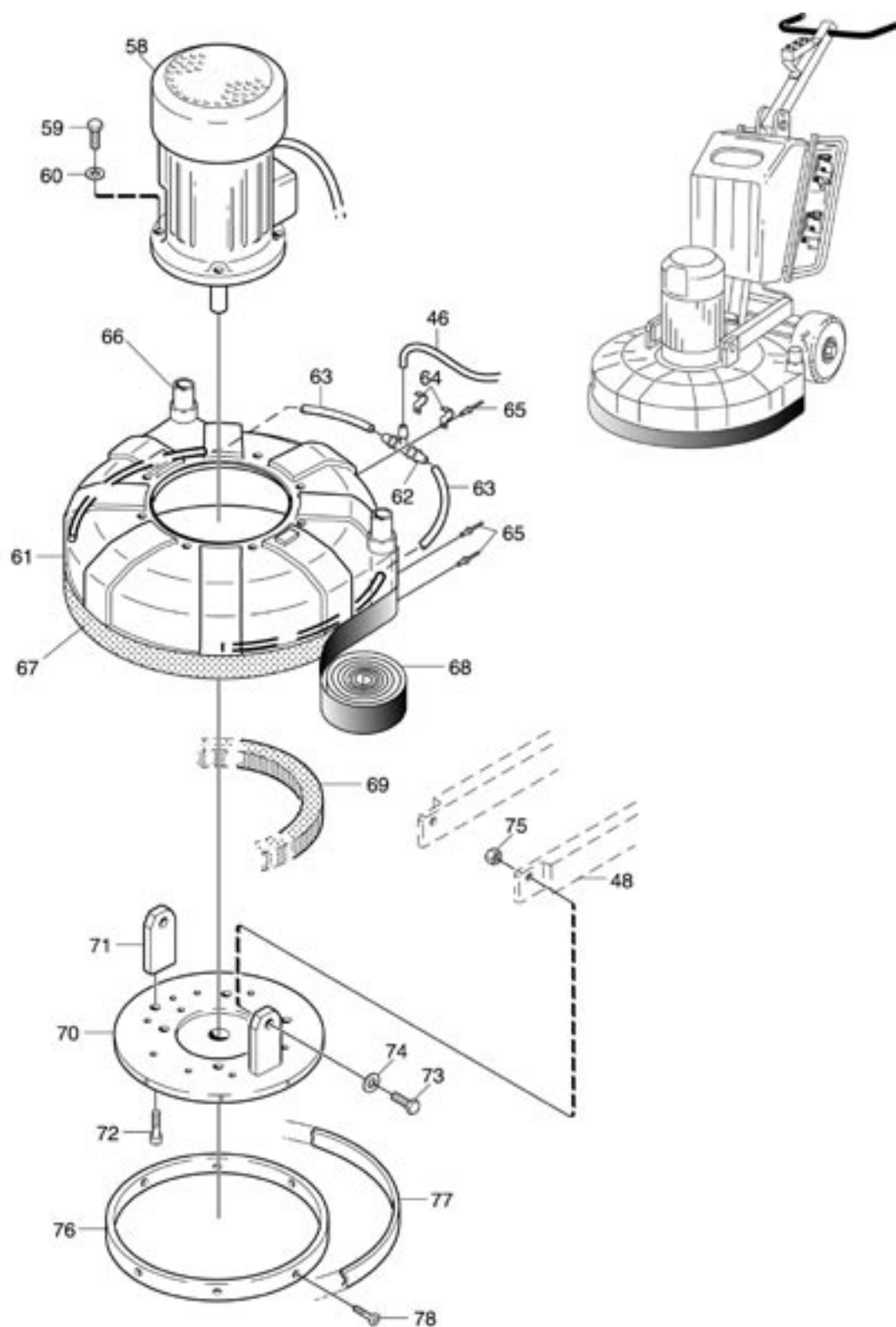
Parts list HTC 800 (models built before year 2000)

Pos.	Description	Art.No:	Remarks
84	WEDGE RK 12X8X40	310044	
85	WEDGE RK 12X8X30	310045	
86	PULLEY HTC 650 50X180	110118	
87	CIRCLIP SGA 40	310043	
88	BEARING CUP PULLEY LOWER HTC650	110094	
89	CIRCLIP SGA 60	310018	
90	BALL BEARING 6012 2RS C3	110026	
91	PULLEY HUB HTC 650	110095	
92	LOWER COVER HTC 800	110110	
93	SCREW MFT-TT M6X16 8.8 GALV	310014	
94	HUB COVER (PROCESSING) HTC 650(/800)	110097	
95	SCREW MFT M6X30 8.8 GALV	310017	
96	CIRCLIP SGA 70	310040	
97	GRINDING HOLDER UPPER HTC 650/800	110098	
98	CYLINDER PIN CP 6X20 H8	310046	
99	HOLDER, POLYCORD, OUTER	110099	
100	SCREW MC6S M6X16 8.8 GALV	310082	
101a	RONDELLPAD, POLYCORD BLACK 184MM	110371	
101b	PAD, POLYCORD GREEN 184MM	110369	
101c	PAD, POLYCORD GREEN 184MM	110369	
102	HOLDER, POLYCORD INNER	110397	
103	SCREW MFT-TT M6X16 8.8 GALV	310014	
104	SPRING	110100	
105	GRINDING HOLDER, LOWER, HTC 800	110111	
106	SCREW MC6S M6X20 12.9	310027	
107	CROSS-PIECE PART 3	110054	
108	CROSS-PIECE PART 1 M8	110257	
109	SCREW MFT M8X16 8.8 GALV	310070	
110	CROSS-PIECE PART 2	110056	
111	SCREW MF6S M5X8 GALV	310028	

Exploded diagram - HTC 800 E

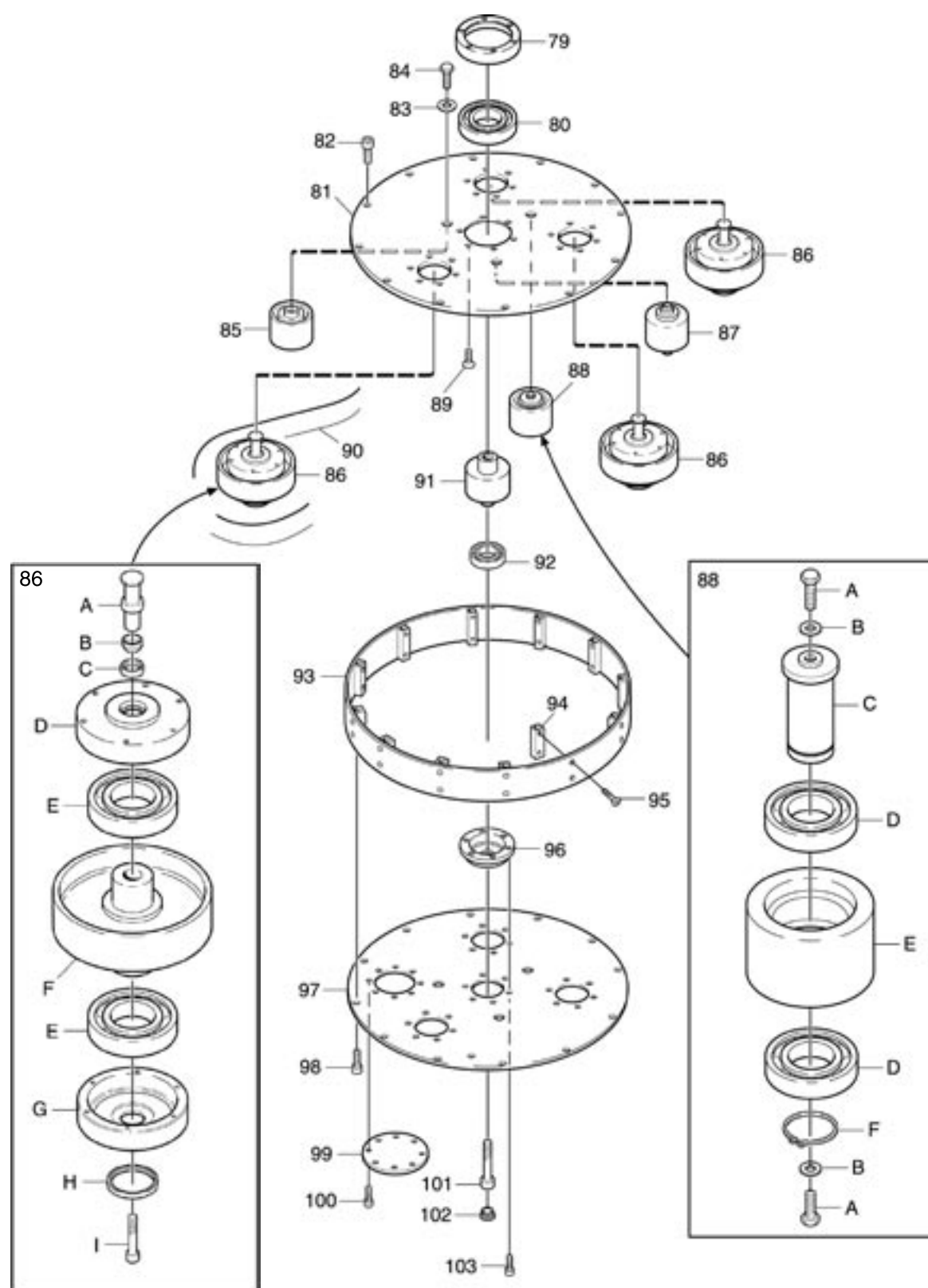


Exploded diagram - HTC 800 E



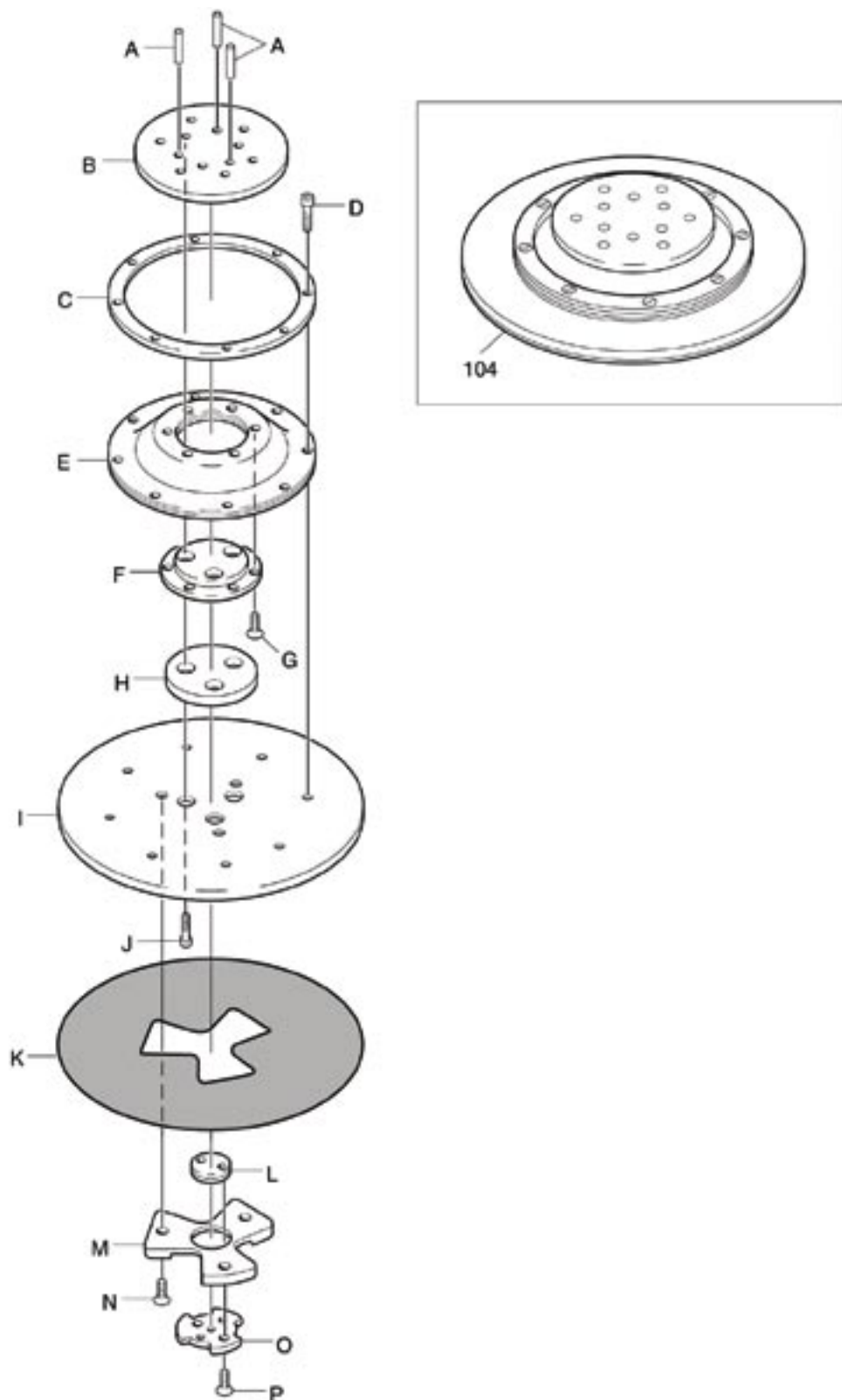
HTC 800E2:2001A

Exploded diagram - HTC 800 E



HTC 800E3.2001A

Exploded diagram grinding holder, HTC 800



HTC 800E4:2001A

Parts list - HTC 800 E

Pos.	Description	Part No.	Remarks
1	CHASSIS HTC 650/800 HANDLE	110057	
1A	SHRINK TUBING TO HTC HANDLE	110308	
2	COVER PLUG TO HTC HANDLE	110357	
3	CONSOLE CONTROL PANEL	110058	
4	SCREW RXS B10X16 GALV	310029	
5	CONTROL PANEL, COMPLETE	110122	
5A	EMERGENCY STOP, COMPLETE XB4	110481	
5B	POTENTIOMETER COMPLETE	110500	
5C	ON/OFF KNOB, COMPLETE	110499	
5D	LAMP, GREEN	110491	
5E	RESET BUTTON COMPLETE	110498	
5F	FRONT/BACK KNOB, COMPLETE	110485	
6	SCREW MC6S M6X12 8.8 GALV	310030	
7	WASHER BRB M6 GALV	310012	
8	SCREW MC6S M6X12 8.8 GALV	310030	
9	WASHER BRB M6 GALV	310012	
10	WIRING HOLDER (CLIP) JR12	110059	
11	SCREW MC6S M6X12 8.8 GALV	310030	
12	WASHER BRB M6 GALV	310012	
13	WIRING HOLDER (CLIP) JR12	110059	
14	CHASSIS HTC 650/800 POST	110060	
15	SCREW M6S M16X120 GALV	310031	
16	WASHER BRB M16 GALV	310032	
17	NUT NYLOCK M16 GALV DIN985	310033	
18	WASHER BRB M16 GALV	310032	
19	SPRINT CHASSIS HTC 650/800	110061	
20	HAIR PIN, GALV 3.5X75	310125	
21	SCREW MC6S M6X12 8.8 GALV	310030	
22	WASHER BRB M6 GALV	310012	
23	TANK BRACKET	110062	
24	FREQUENCY CONVERTER 7.5 kW		as specified
24A	RUNNING TIME METRE CURTIS	110309	
25	CHASSIS HTC 650/800 PROTECTIVE CAGE	110158	
26	SCREW MF6S M8X25 GALV	310071	
27	WALL SOCKET 16A 200-250V 3P BLUE	110534	
28	SCREW M6S M5X20 GALV	310010	
29	WALL INLET 16A 346-415V 5P RED		as specified
30	PHASE INDICATOR 4 DIODES 16A 400 VOLTS	110229	
	PHASE INDICATOR 3 DIODES 200V	110344	
31	SCREW M6S M5X20 GALV	310010	
32	WASHER BRB M5 GALV	310194	
33	NUT M6M M5 GALV	310193	
34	CONNECTOR, FEMALE, MOTOR		as specified

Parts list - HTC 800 E

Pos.	Description	Part No.	Remarks
35	SCREW		not available
36	CONNECTOR, MALE, MOTOR		as specified
37	ELECTRICAL CABLE, MOTOR		as specified
38	CONTROL PANEL CABLE		as specified
39	CONTROL PANEL CABLE		as specified
40	WATER TANK HTC 650/800	110069	
41	NUT 1253-3/8 (T-HOSE CONNECTOR)	110332	
42	HOSE CONNECTOR 2601-12-3/8	110147	
43	HOSE CONNECTOR 2601-12-1/4	110205	
44	ELBOW-PIPE-IU 2020-1/4	110146	
45	WATER VALVE TO GRINDER	110007	
46	HOSE LARGE REINFORCED PVC	110130	
47	SCREW M6S M5X20 GALV	310010	
48	CHASSIS HTC 800 BOTTOM	110619	
49	SCREW M6S M12X65 GALV	310034	
50	WASHER BRB M12 GALV	310003	
51	NUT NYLOCK M12 GALV DIN985	310004	
52	WHEEL HTC 800	110382	
53	CAP, WHEEL		not available
54	CIRCLIP SGA 20	310016	
55	BALL BEARING HTC800 WHEEL, OUTER	110279	
56	BALL BEARING HTC800 WHEEL, INNER	110278	
57	GASKET, WHEEL		not available
58	MOTOR 7.5 DPIG 132M-4 200/346	110226	
59	SCREW M6S M12X25 GALV	310011	
60	WASHER BRB M12 GALV	310003	
61	COVER HTC 800 NEW MODEL, HIGH	110133	
62	T-PIPE 10MM	110144	
63	HOSE, POLYURETHANE TUBE 10/7 BLACK	110145	
64	WIRING HOLDER (CLIP) JR14	110359	
65	POP RIVET 4.8X12.7	310084	
66	PIPE, PEH 50 LK	110383	
67	VELCRO MALE WIDTH 38MM	110264	
68	SPLASHGUARD HTC 800 3MX60MM	110114	
69	FOAM 25X2500X20 ETHAFOAM 220E	110241	
70	MOTOR PLATE HTC 800 NEW M132	110153	
71	FIXING LUG	110072	
72	SCREW MC6S M8X25 12,9	310036	
73	SCREW M6S M12X45 GALV	310037	
74	BRICWASHER BRB M12 GALV	310003	
75	NUT NYLOCK M12 GALV DIN985	310004	
76	BELT RING HTC 800 NEW	110143	
77	BELT, UPPER, HTC 800 NEW MODEL	110126	

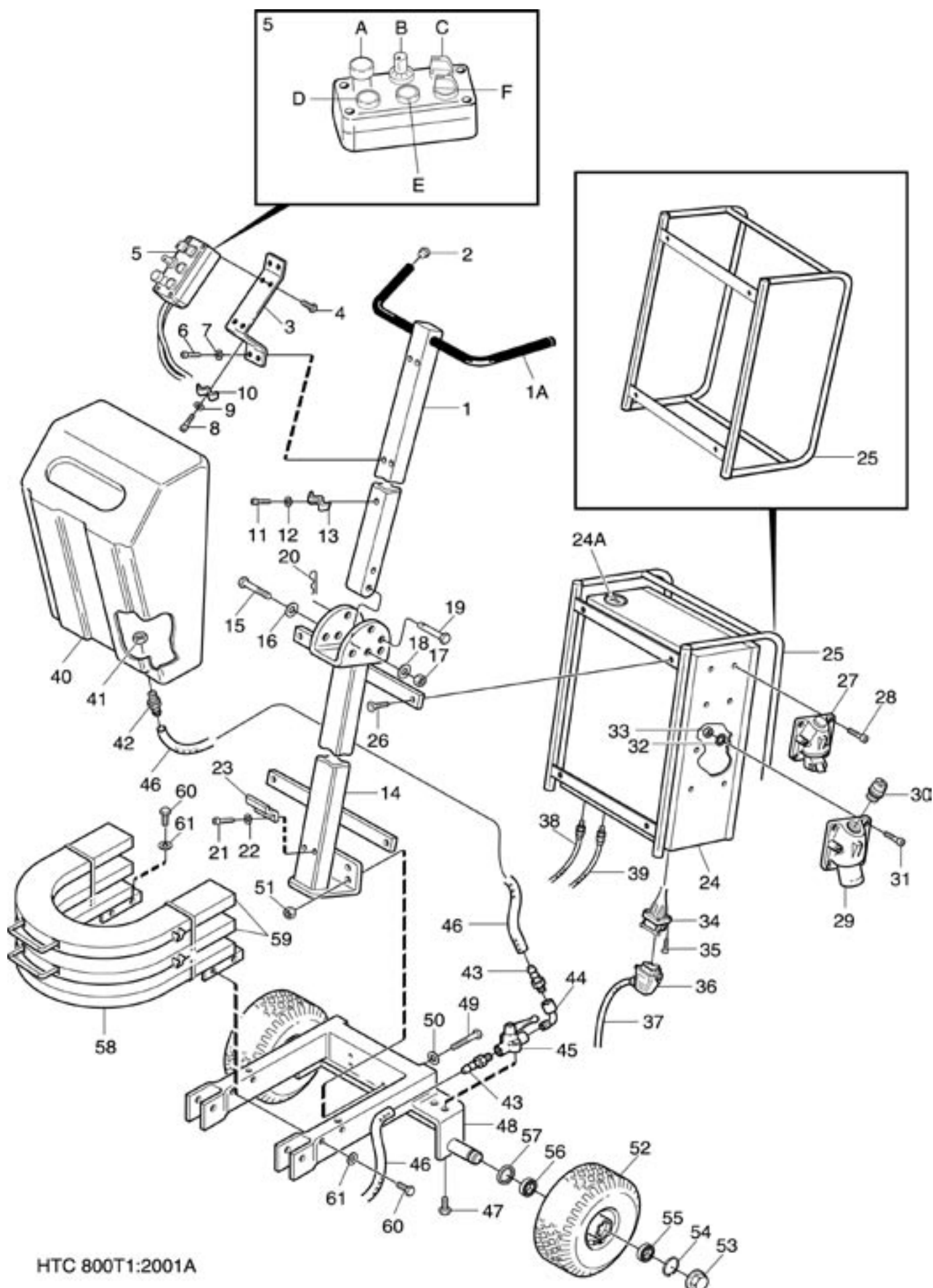
Parts list - HTC 800 E

Pos.	Description	Part No.	Remarks
78	SCREW MFT-TT M6X16 8.8 GALV	310014	
79	BEARING CUP MOTOR PLATE HTC 800	110151	
80	BALL BEARING 6314-2RS C3	110174	
81	UPPER COVER HTC 800 (NEW)	110325	
82	SCREW MC6S M8X16 GALV 8.8	310080	
83	WASHER TBR SB M10 GALV	310042	
84	SCREW MF6S M10X20	310078	
85	TENSIONING WHEEL, COMPLETE, HTC 800	110568	
86	PULLEY ASSEMBLY, COMPLETE, HTC 800	110567	
86A	SHAFT JOURNAL	110318	
86B	VR SEAL 4030-25A	110531	
86C	RADIAL SEAL CR20X35X7 HMSA 10RG	110291	
86D	BEARING CUP, UPPER, HTC 800/650 NEW	110296	
86E	BALL BEARING 6312-2RS1/C3 HT	110289	
86F	PULLEY HTC 800 NEW MODEL	110295	
86G	BEARING CUP, LOWER, HTC 800/650 NEW	110297	
86H	RADIAL SEAL CR 60X75X8 HMSA7 R	110290	
86I	SCREW MC6S M8X60 12.9	310076	
87	COUNTERWEIGHT HTC 650/800 NEW	110315	
88	TENSIONING WHEEL, COMPLETE, HTC 800	110568	
88A	SCREW MF6S M10X20	310078	
88B	WASHER TBR SB M10 GALV	310042	
88C	SHAFT BELT TENSIONER	110317	
88D	BALL BEARING 6207 2RS C3	110078	
88E	TENSIONING WHEEL HTC 800/650 NEW	110316	
88F	CIRCLIP SGA 35	310038	
89	SCREW MF6S M8X25 GALV	310071	
90	BELT, INNER HTC 800 NEW 7.5KW	110288	
91	CENTRE HUB	110293	
92	BALL BEARING 6207 2RS C3	110078	
93	EDGING STRIP HTC 800 NEW	110326	
94	FIXING BOSS	110314	
95	SCREW MFT-TT M6X16 8.8 GALV	310014	
96	BEARING CUP CENTRE HTC 800	110140	
97	LOWER COVER HTC 800 NEW	110324	
98	SCREW MC6S M8X16 GALV 8.8	310080	
99	COVER, INSPECTION HOLE, HTC 800	110141	
100	SCREW M6S M5X10	310052	
101	SCREW MC6S M12X95 12.9	310051	
102	TERMINATION PLUG BRASS M25 M25	110138	
103	SCREW MC6S M6X12 8.8 GALV	310030	
104	GRINDING HOLDER, COMPLETE, HTC 800	110603	
	GRINDING HOLDER, COMPLETE, HTC 800EZ	111244	

Parts list - HTC 800 E

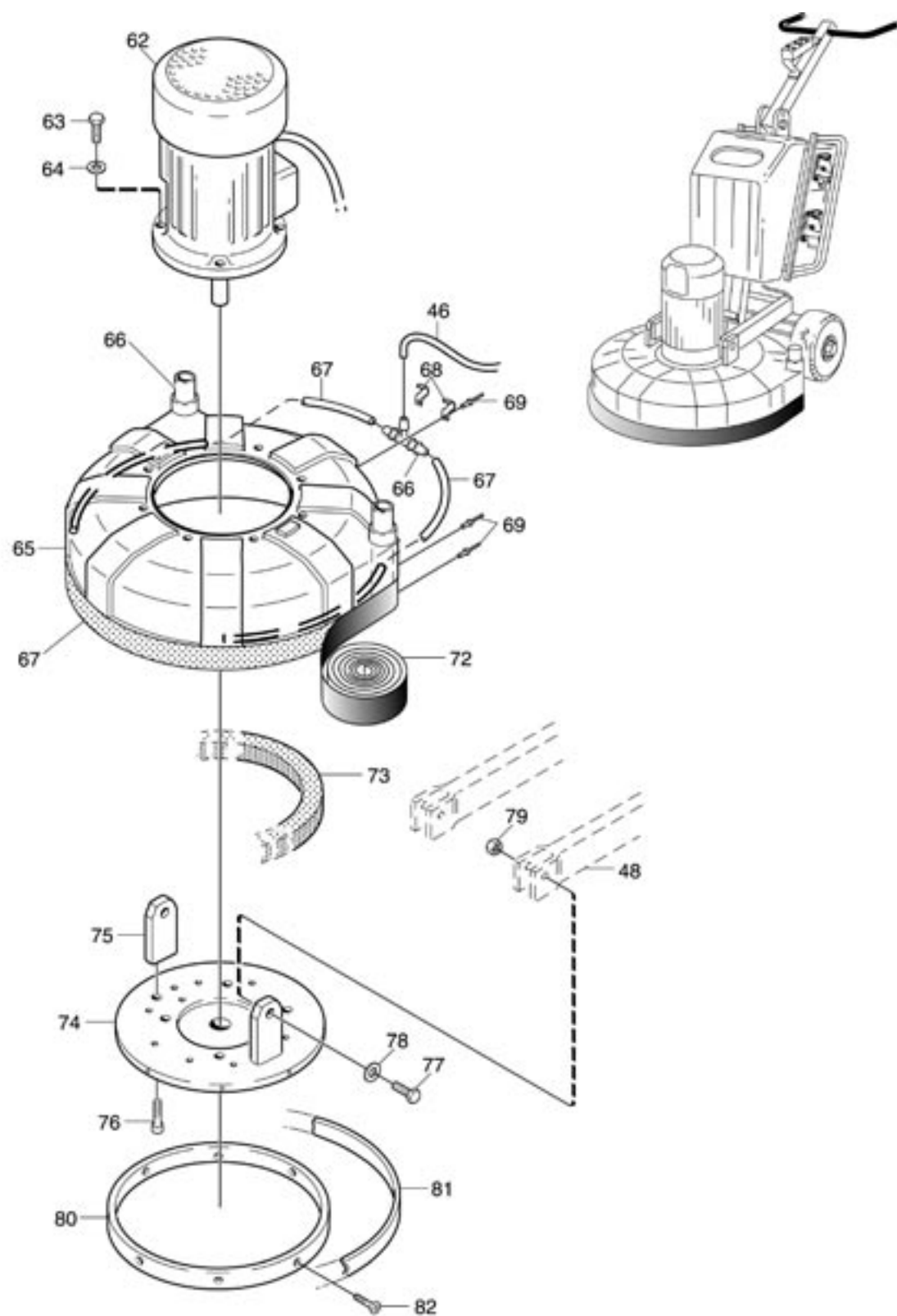
Pos.	Description	Part No.	Remarks
104A	CYLINDER PIN CP 6X20 H8	310046	
104B	GRINDING HOLDER UPPER HTC 650/800	110098	
104C	HOLDER, POLYCORD, OUTER	110099	
104D	SCREW MC6S M6X16 8.8 GALV	310082	
104E	PAD, POLYCORD BLACK 184MM	110371	
	PAD, POLYCORD GREEN 184MM	110369	
	PAD, POLYCORD GREEN 184MM	110369	
104F	HOLDER, POLYCORD INNER	110397	
104G	SCREW MFT-TT M6X16 8.8 GALV	310014	
104H	SPRING	110100	
104I	GRINDING HOLDER, LOWER, HTC 800	110111	
104J	SCREW MC6S M6X20 12.9	310027	
104K	VELCRO GRINDING HOLDER 270MM	110148	
104L	CROSS-PIECE PART 3	110054	
	CROSS-PIECE PART 3 HTC EZ	110937	
104M	CROSS-PIECE PART 1 M8	110257	
	CROSS-PIECE PART 1 HTC EZ	110930	
104N	SCREW MFT M8X16 8.8 GALV	310070	
104O	CROSS-PIECE PART 2	110056	
	CROSS-PIECE PART 2 HTC EZ	110955	
104P	SCREW MF6S M5X8 GALV	310028	

Exploded diagram - HTC 800 HD



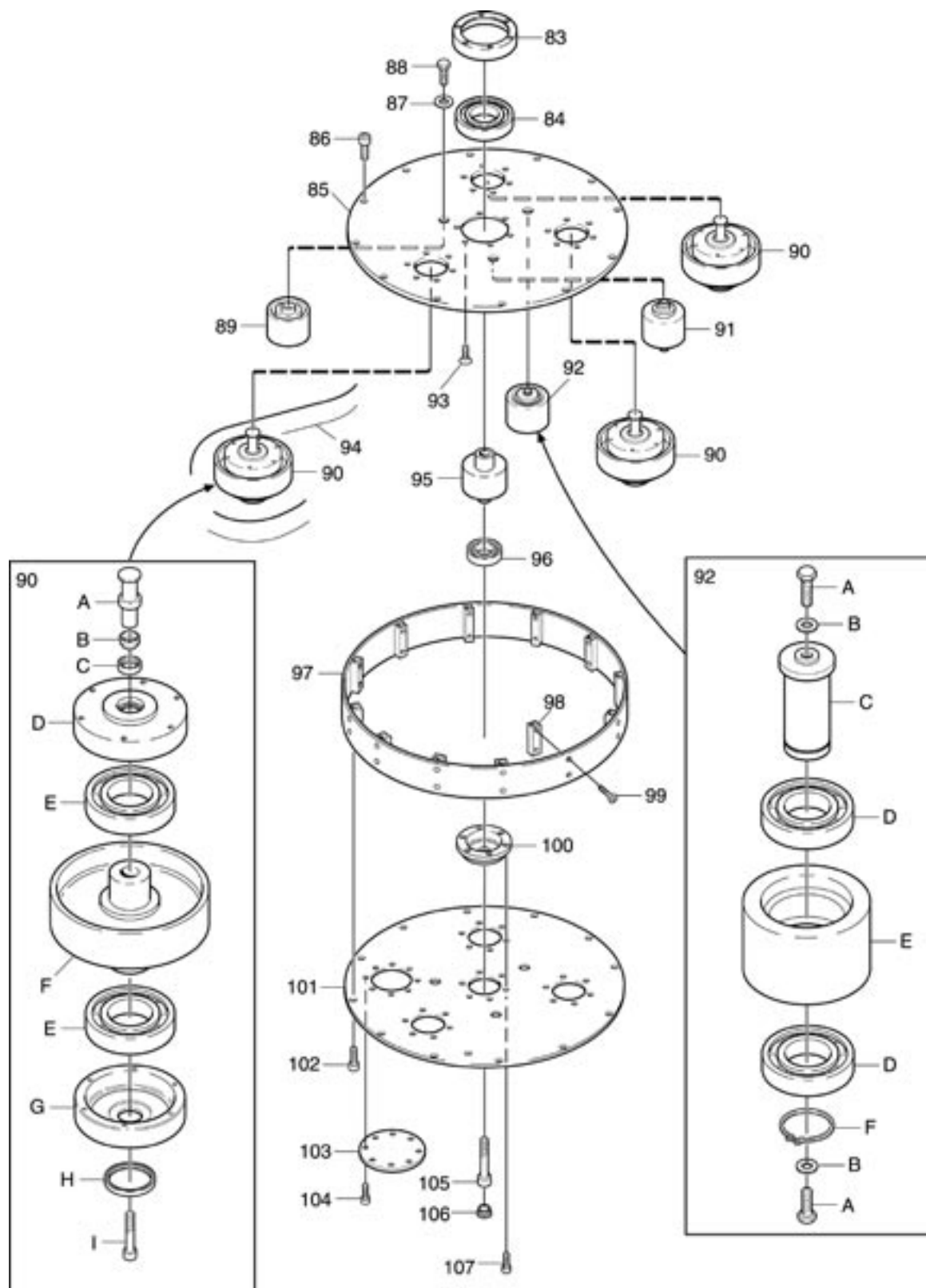
HTC 800T1:2001A

Exploded diagram - HTC 800 HD



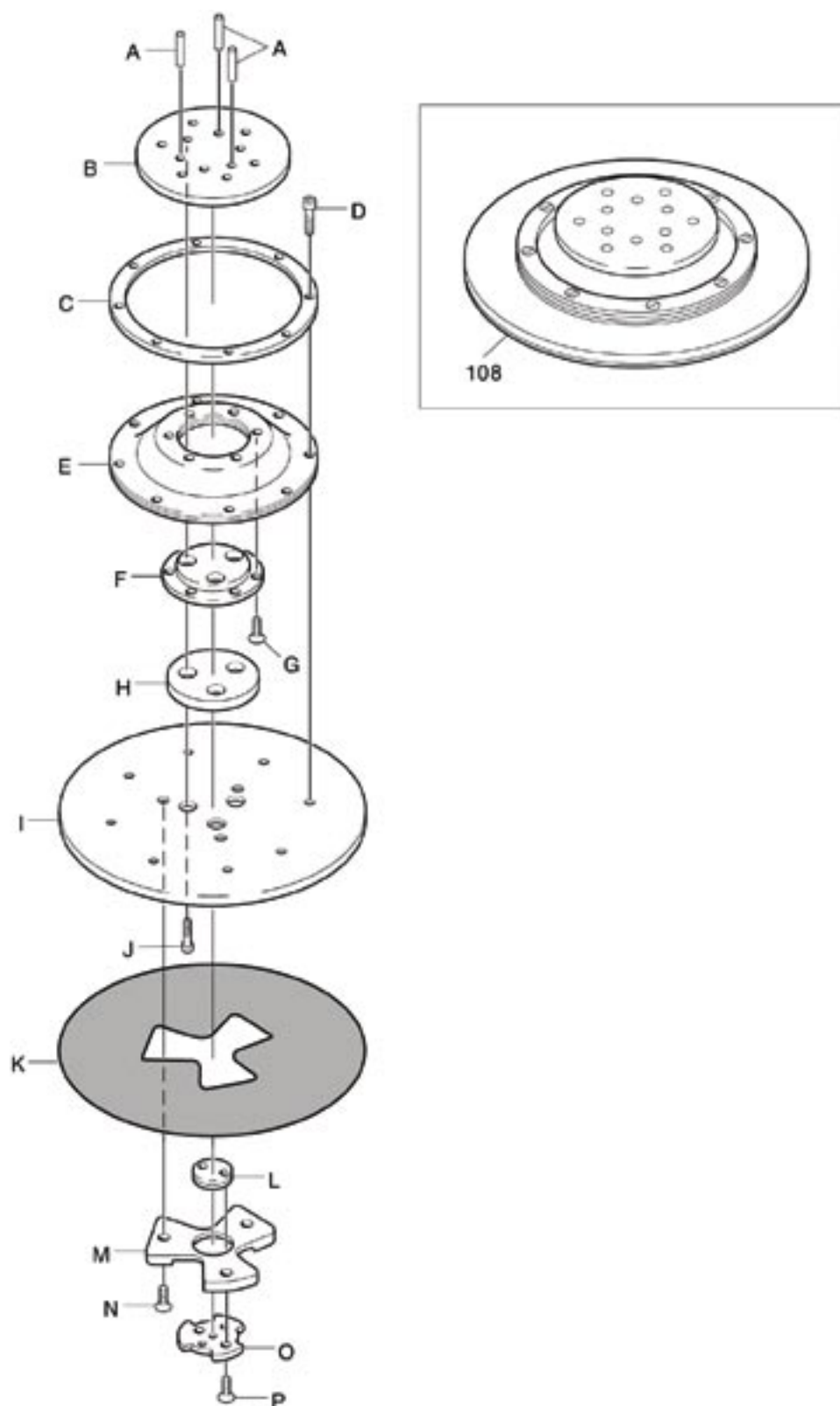
HTC 800T2:2001A

Exploded diagram - HTC 800 HD



HTC 800T3:2001A

Exploded diagram grinding holder, HTC 800 HD



HTC 800E4:2001A

Parts list - HTC 800 HD

Pos.	Description	Art.No:
1	CHASSIS HTC 650/800 HANDLE	110057
1A	SHRINK TUBING TO HTC HANDLE	110308
2	COVER PLUG TO HTC HANDLE	110357
3	CONSOLE CONTROL PANEL	110058
4	SCREW RXS B10X16 GALV	310029
5	CONTROL PANEL, COMPLETE	110122
5A	EMERGENCY STOP, COMPLETE XB4	110481
5B	POTENTIOMETER COMPLETE	110500
5C	ON/OFF KNOB, COMPLETE	110499
5D	LAMP GREEN ZB4-BV03	110491
5E	RESET BUTTON, COMPLETE	110498
5F	FRONT/BACK KNOB, COMPLETE	110485
6	SCREW MC6S M6X12 8.8 GALV	310030
7	WASHER BRB M6 GALV	310012
8	SCREW MC6S M6X12 8.8 GALV	310030
9	WASHER BRB M6 GALV	310012
10	WIRING HOLDER (CLIP) JR12	110059
11	SCREW MC6S M6X12 8.8 GALV	310030
12	WASHER BRB M6 GALV	310012
13	WIRING HOLDER (CLIP) JR12	110059
14	CHASSIS HTC 650/800 POST	110060
15	SCREW M6S M16X120 GALV	310031
16	WASHER BRB M16 GALV	310032
17	NUT NYLOCK M16 GALV DIN985	310033
18	WASHER BRB M16 GALV	310032
19	SPRINT CHASSIS HTC 650/800	110061
20	HAIR PIN, GALV 3.5X75	310125
21	SCREW MC6S M6X12 8.8 GALV	310030
22	WASHER BRB M6 GALV	310012
23	TANK BRACKET	110062
24	FREQUENCY CONVERTER 11 kW	as specified
24A	RUNNING TIME METRE CURTIS	110309
25	CHASSIS HTC 650/800 PROTECTIVE CAGE	110158
26	SCREW MF6S M8X25 GALV	310071
27	WALL SOCKET 16A 200-250V 3P BLUE	110534
28	SCREW M6S M5X20 GALV	310010
29	WALL INLET 32A 346-415V 5P RED	as specified
30	PHASE INDICATOR 4 DIODES 16A 400 VOLTS	110229
	PHASE INDICATOR 3 DIODES 200V	110344
31	SCREW M6S M5X20 GALV	310010
32	WASHER BRB M5 GALV	310194
33	NUT M6M M5 GALV	310193
34	CONNECTOR, FEMALE, MOTOR	as specified

Parts list - HTC 800 HD

Pos.	Description	Art.No:
35	SCREW	not available
36	CONNECTOR, MALE, MOTOR	as specified
37	ELECTRICAL CABLE, MOTOR	as specified
38	CONTROL PANEL CABLE	as specified
39	CONTROL PANEL CABLE	as specified
40	WATER TANK HTC 650/800	110069
41	NUT 1253-3/8 (T-HOSE CONNECTOR)	110332
42	HOSE CONNECTOR 2601-12-3/8	110147
43	HOSE CONNECTOR 2601-12-1/4	110205
44	ELBOW-PIPE-IU 2020-1/4	110146
45	WATER VALVE TO GRINDER	110007
46	HOSE LARGE REINFORCED PVC	110130
47	SCREW M6S M5X20 GALV	310010
48	CHASSIS HTC 800 BOTTOM	110619
49	SCREW M6S M12X65 GALV	310034
50	WASHER BRB M12 GALV	310003
51	NUT NYLOCK M12 GALV DIN985	310004
52	WHEEL HTC 800	110382
53	CAP, WHEEL	not available
54	CIRCLIP SGA 20	310016
55	BALL BEARING HTC800 WHEEL, OUTER	110279
56	BALL BEARING HTC800 WHEEL, INNER	110278
57	GASKET, WHEEL	not available
58	BOTTOM OF WEIGHT SET HTC 800	110524
59	WEIGHT 20KG FOR WEIGHT SET	110525
60	SCREW M6S M10X25 GALV	310114
61	WASHER BRB M10 GALV	310048
62	MOTOR 11KW 400/690V 132M-4	110476
63	SCREW M6S M12X25 GALV	310011
64	WASHER BRB M12 GALV	310003
65	COVER HTC 800 NEW MODEL, HIGH	110133
66	T-PIPE 10MM	110144
67	HOSE, POLYURETHANE TUBE 10/7 BLACK	110145
68	WIRING HOLDER (CLIP) JR14	110359
69	POP RIVET 4.8X12.7	310084
70	PIPE, PEH 50 LK	110383
71	VELCRO MALE WIDTH 38MM	110264
72	SPLASHGUARD HTC 800 3MX60MM	110114
73	FOAM 25X2500X20 ETHAFOAM 220E	110241
74	MOTOR PLATE HTC 800 NEW M132	110153
75	FIXING LUG	110072
76	SCREW MC6S M8X25 12.9	310036
77	SCREW M6S M12X45 GALV	310037

Parts list - HTC 800 HD

Pos.	Description	Art.No:
78	WASHER BRB M12 GALV	310003
79	NUT NYLOCK M12 GALV DIN985	310004
80	BELT RING HTC 800 NEW	110143
81	BELT, UPPER, HTC 800 NEW MODEL	110126
82	SCREW MFT-TT M6X16 8.8 GALV	310014
83	BEARING CUP MOTOR PLATE HTC 800	110151
84	BALL BEARING 6314-2RS C3	110174
85	UPPER COVER HTC 800 (NEW)	110325
86	SCREW MC6S M8X16 GALV 8.8	310080
87	WASHER TBR SB M10 GALV	310042
88	SCREW MF6S M10X20	310078
89	TENSIONING WHEEL, COMPLETE, HTC 800	110568
90	PULLEY ASSEMBLY, COMPLETE, HTC 800	110567
90A	SHAFT JOURNAL	110318
90B	VR SEAL 4030-25A	110531
90C	RADIAL SEAL CR20X35X7 HMSA 10RG	110291
90D	BEARING CUP, UPPER, HTC 800/650 NEW	110296
90E	BALL BEARING 6312-2RS1/C3 HT	110289
90F	PULLEY HTC 800, NEW MODEL	110295
90G	BEARING CUP, LOWER, HTC 800/650 NEW	110297
90H	RADIAL SEAL CR 60X75X8 HMSA7 R	110290
90I	SCREW MC6S M8X60 12.9	310076
91	COUNTERWEIGHT HTC 650/800 NEW	110315
92	TENSIONING WHEEL, COMPLETE, HTC 800	110568
92A	SCREW MF6S M10X20	310078
92B	WASHER TBR SB M10 GALV	310042
92C	SHAFT BELT TENSIONER	110317
92D	BALL BEARING 6207 2RS C3	110078
92E	TENSIONING WHEEL HTC 800/650, NEW	110316
92F	CIRCLIP SGA 35	310038
93	SCREW MF6S M8X25 GALV	310071
94	BELT, INNER HTC 800 NEW 11KW	110287
95	CENTRE HUB 11 kW	110292
96	BALL BEARING 6207 2RS C3	110078
97	EDGING STRIP HTC 800 NEW	110326
98	FIXING BOSS	110314
99	SCREW MFT-TT M6X16 8.8 GALV	310014
100	BEARING CUP CENTRE HTC 800	110140
101	LOWER COVER HTC 800 NEW	110324
102	SCREW MC6S M8X16 GALV 8.8	310080
103	COVER, INSPECTION HOLE, HTC 800	110141
104	SCREW M6S M5X10	310052
105	SCREW MC6S M12X95 12.9	310051

Parts list - HTC 800 HD

Pos.	Description	Art.No:
106	TERMINATION PLUG BRASS M25 M25	110138
107	SCREW MC6S M6X12 8.8 GALV	310030
108	GRINDING HOLDER, COMPLETE, HTC 800	110603
	GRINDING HOLDER, COMPLETE, HTC 800EZ	111244
108A	CYLINDER PIN CP 6X20 H8	310046
108B	GRINDING HOLDER UPPER HTC 650/800	110098
108C	HOLDER, POLYCORD, OUTER	110099
108D	SCREW MC6S M6X16 8.8 GALV	310082
108E	PAD, POLYCORD BLACK 184MM	110371
	PAD, POLYCORD GREEN 184MM	110369
	PAD, POLYCORD GREEN 184MM	110369
108F	HOLDER, POLYCORD INNER	110397
108G	SCREW MFT-TT M6X16 8.8 GALV	310014
108H	SPRING	110100
108I	GRINDING HOLDER, LOWER, HTC 800	110111
108J	SCREW MC6S M6X20 12.9	310027
108K	VELCRO GRINDING HOLDER 270MM	110148
108L	CROSS-PIECE PART 3	110054
	CROSS-PIECE PART 3 HTC EZ	110937
108M	CROSS-PIECE PART 1 M8	110257
	CROSS-PIECE PART 1 HTC EZ	110930
108N	SCREW MFT M8X16 8.8 GALV	310070
108O	CROSS-PIECE PART 2	110056
	CROSS-PIECE PART 2 HTC EZ	110955
108P	SCREW MF6S M5X8 GALV	310028

Changing the inner belt, HTC 500/650/800

When changing the belt on the HTC 650/800, certain steps are easiest if performed by two people. **NOTE: Never use the same screw twice.**

To open the machine:

1. Disconnect the chassis from the grinding head.
2. Disconnect the motor cable (make a note of the connections).
3. Remove the cover.
4. Turn the grinding head upside-down and stand it on the motor.
5. Remove the cross from the grinding holders.
6. Remove the grinding holders.
7. Remove all the upward-facing screws, approx. 35-40 pcs.
8. Remove all the small covers, and finally the large cover (may require a crowbar).

When the machine is open, it is possible to see what is broken. Is the belt broken? Is there a lot of dirt in the machine? Remove the upper belt. Spin the pulley to make sure it turns freely and smoothly without making a noise. Try tipping the pulley. If it can be tipped, the upper ball bearing is broken. If one ball bearing is broken, change all the ball bearings since the cost of parts is low compared with time it takes to dismantle the machine. If the belt has broken, this should be returned as defective to HTC. Slip marks on the belt, however, can arise from removing carpet adhesive and due to carelessness when starting up the machine (see the machine manual).

To dismantle the machine further, proceed as follows:

9. Remove the screw from the centre hub (requires electric or compressed-air nut runner).
10. Use crowbars to remove the centre hub.
11. Remove the circlip from the motor plate hub (located under the centre hub).
12. Remove the "can" from the motor and motor plate. Use the special tool and a sledgehammer if required.
13. Put the "can" on a workbench with the open end down.
NOTE! Exercise care so that the pulley assembly does not fall out.
14. Undo the screws securing the three shaft covers and remove these. Lift off the can. The pulley should remain on the bench (may require tapping out with a non-rebounding hammer).
16. Press the ball bearings off the shafts with an extractor or a hydraulic press.
17. Press on new ball bearings. Make sure to press on the ball bearing's inner ring. 6312 ball bearings are bonded with Loctite 603 against the shaft (for machines after 2000).
18. Position the three pulleys on the bench exactly as they were when you removed the "can".
19. Place the "can" over the three pulleys.
20. Apply grease to the bearings and fit the covers.
21. Secure the covers by tightening the screws in sequence.
22. Turn over the can with the pulleys now mounted and refit the motor plate hub.
23. Fit the circlip.
24. Apply grease to the motor shaft and then fit the centre hub.

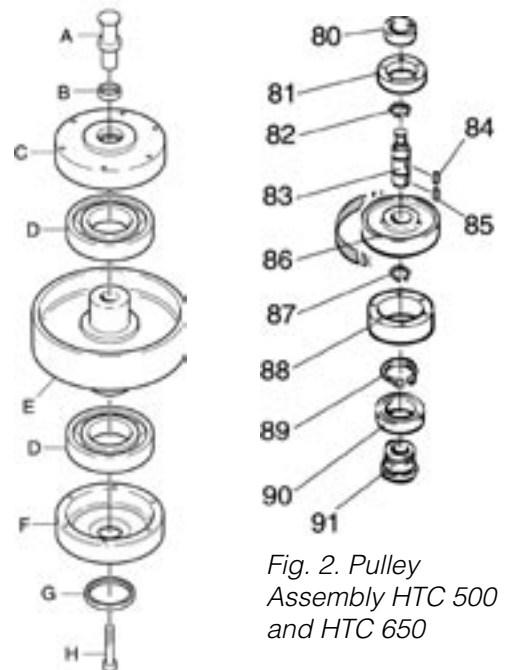


Fig. 2. Pulley Assembly HTC 500 and HTC 650

Fig. 1. Pulley Assembly HTC 800.



Fig. 3

The machine should now look the same as in Fig. 3. It is now time to fit the belt.

26. Unscrew the fixing bosses by the pulleys if necessary.

NOTE: If repairing an HTC 800 (year 2000 model or later), screw on the belt tool now.

27. Soak the belt in hot water for about 15 minutes.

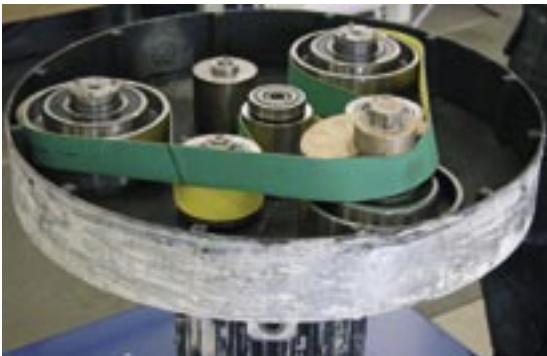


Fig. 4

28. Arrange the belt according to figure 4.

29. **Once the belt is fitted according to figure 4 the belt tensioning tool should be used to press down the belt.**

30. Screw the tool onto the drive.



Fig. 5



Fig. 6



Fig. 7

31. Turn the tool while pressing down the belt. Once the belt is in position, remove the tool and turn the belt while pressing it down.

NOTE: This step requires two people (figures 5-7).

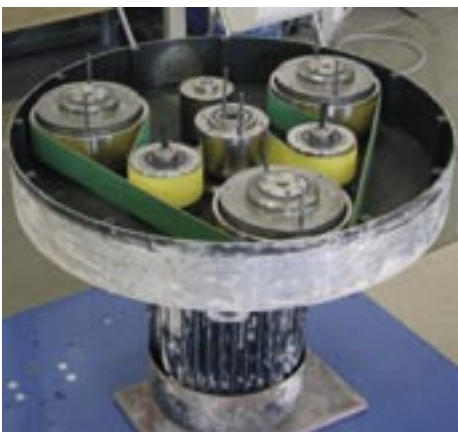


Fig. 8

32. Once this is done (Fig. 8) fit the bearing cup to the centre hub and screw the fixing bosses in place.
33. Clean the inside of the machine, making sure that no loose items such as screws have been left there, before replacing the cover. A foreign object could negate the entire service.



*Fig. 9 Locating pin M6 For bearing cups
HTC 500, 650 and 800. Art.No:310050*



*Fig. 10 Locating pin M10 For tensioning wheel HTC
650 and 800. Not available as Art.
Produced by cutting the head off a
M10 screw.*

34. Locating pins facilitate closing.
Order locating pins from HTC or make your own by cutting the heads off long M6 screws.
35. Thread the locating pins, 2 pins per bearing cup, 1 per tensioning wheel. See Fig. 8.



Fig. 11

36. Position the cover (Fig. 11). Using a crowbar helps.

NOTE! The cover on a HTC 500 can only be fitted in one way. Make sure that all the holes are correctly positioned.



Fig. 12

37. Apply a flange seal to the edge of the edging strip to seal the machine. The machine must be sealed so that dust and water cannot get in. Use Loctite 5970 flange sealant. See Fig. 12.



Fig. 13



Fig. 14

38. Once the machine is sealed, press down the cover. It can be difficult to get the tensioning wheel shafts in the right place. The simplest solution is to use a rigging screw as illustrated in Fig. 13. Thread the rigging screw into a fixing boss and then pull the tensioning wheel shaft into its correct position. It may be necessary to give it a light tap with a non-rebounding hammer to get it into position.
39. An alternative is to strike the tensioning wheel into the correct position according to Fig. 14.
40. Once everything is in place, apply grease to the ball bearings and fit the cover. Replace the screws that were originally removed with new screws and make sure they are tightened.

NOTE! Never use the same screw twice!

41. Refit the grinding holders. Turn the grinding holders several turns before turning over the grinding head.

Changing the upper belt, HTC 500

Changing the upper belt on the HTC 500 is more complicated than the HTC 650. Changing the belt takes 1-2 hours, based on how experienced you are in performing the change.

NOTE! Only use rounded screwdrivers when fitting the belt.

1. Disconnect the chassis from the grinding head.
2. Disconnect the motor cable (make a note of the connections).
3. Remove the cover.
4. Undo and remove the screws securing the motor (Fig. 15).
5. Remove the split plates with the lugs (Fig. 16).
6. Check the seals, and change if they are damaged. Check if the shafts are worn. They should be approx. 17 mm. If they are worn more than 2 mm, the entire pulley shaft must be changed. See pages 37-40, Changing the inner belt, for dismantling instructions.
7. Removing the split plates exposes three shafts.
8. The belt should run on the three shafts and on the edge of the motor plate. **NOTE: Make sure that the belt is not fouled on the sharp edges of the shafts. The belt can crack or break.**
9. Stretch the belt over the three shafts and allow it to take a short cut under the motor (Fig. 17).
10. Use rounded screwdrivers to pry the belt out onto the edge (Fig 18).
11. Once the belt is fitted, refit the split plates.
12. Refit the screws securing the motor.
13. Refit the cover.
14. Connect the motor cable.
15. Refit the chassis on the head.

The machine is now ready to be used.

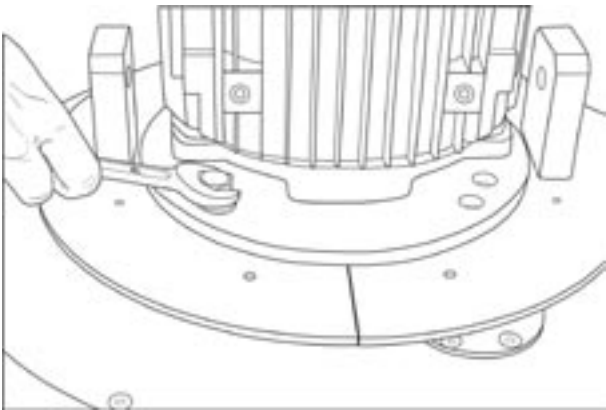


Fig. 15

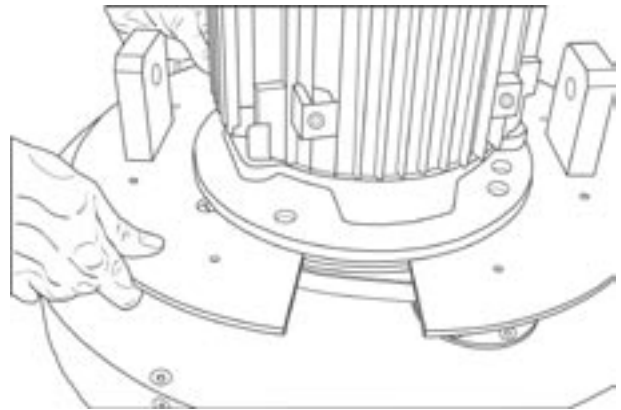


Fig. 16

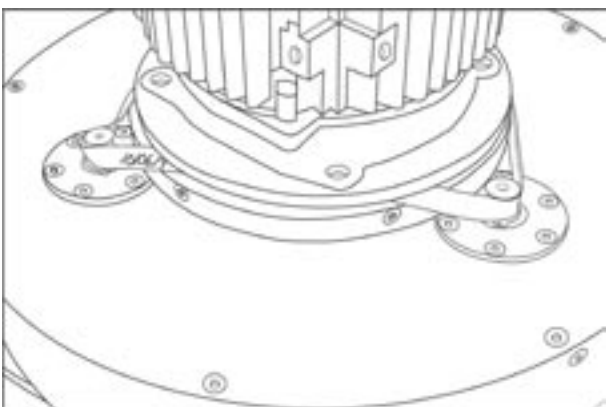


Fig. 17

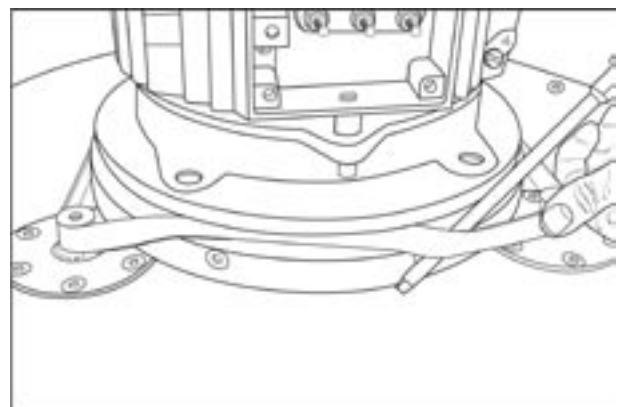


Fig. 18

Changing the upper belt, HTC 650/800

Changing the upper belt on an HTC 650/800 takes approx. 30 minutes to 1 hour.

NOTE! Only use rounded screwdrivers when fitting the belt.

1. Disconnect the chassis from the grinding head.
2. Disconnect the motor cable (make a note of the connections).
3. Remove the cover.
4. Remove all that remains of the old belt. Check the seals, and change if they are damaged.
5. Check if the shaft journals are worn. On the HTC 650 and 800 (models built before year 2000) the shaft is approx. 20 mm. If it is worn more than 2 mm, the entire pulley shaft must be changed. See pages 37-40, Changing the inner belt, for dismantling instructions.
On the newer HTC 800 (models built after year 2000) the upper section of the shaft can be changed. It is fastened from above with a socket head cap screw.
6. Fit the new belt by first threading it over the shafts and then prising it down over the edge of the motor plate as illustrated in Fig 19
7. Refit all parts. The machine is now ready to be used.



Fitting the upper belt, HTC 650/800 (Fig. 19)

Overhauling the grinding holders

These instructions describe how to overhaul or repair a grinding holder. The polycord and spring are the parts that are normally changed. It is vital to overhaul all grinding holders at the same time so that the tools are not subjected to uneven wear. Never use the same screw twice. Clean all components in the grinding holder thoroughly.

Since the design varies between machine models, the machine pictured in the illustrations may look slightly different from your machine.

1. Remove the grinding holder from the machine: remove the cross and then undo the three screws (J) beneath.
2. Turn the grinding holder so that you can undo the screws (D).
3. The grinding holder is now split. The spring and polycord can be changed (H, E).
4. Remove the old spring.
5. Remove the polycord by undoing the screws (G) that are now visible on the top part.
6. Glue the spring (H) to the lower grinding holder (I). It must be positioned in the centre. Use Loctite 406 or equivalent.
7. Fit the polycord (E) Thread and tighten the screws (G) into the top grinding holder (B) (see Fig. 20).
8. Thread and tighten the screws (D) into the lower grinding holder (I) (see Fig. 21).
9. Protruding screws must be ground down before fitting the grinding holder.
10. Refit the grinding holders and the cross.

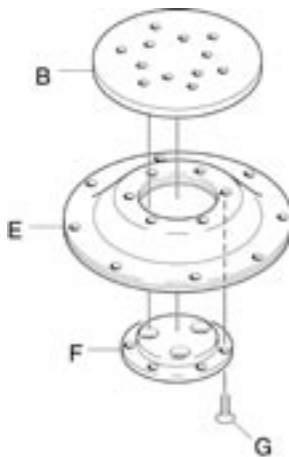


Fig. 20



Fig. 21

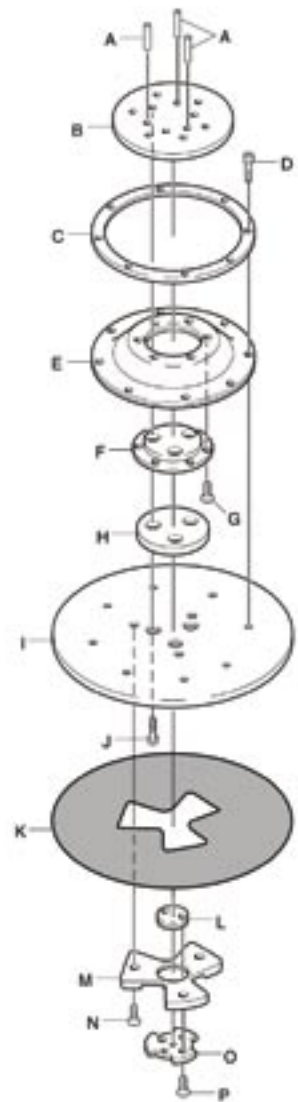
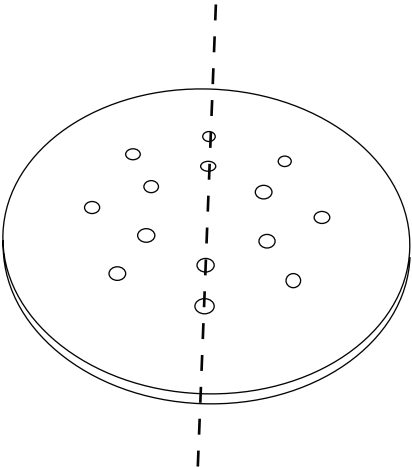
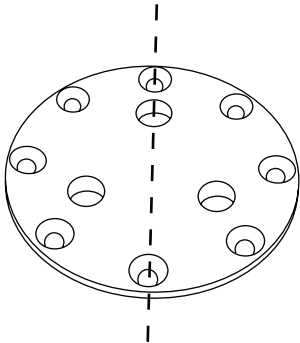


Fig. 22

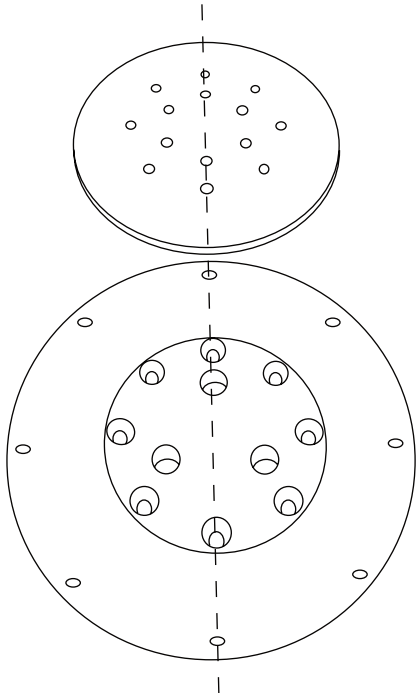
Use the “right line” as a guide when overhauling the grinding holders. The “right line” means turning the various parts of the grinding holder to the correct position in relation to each other during assembly.



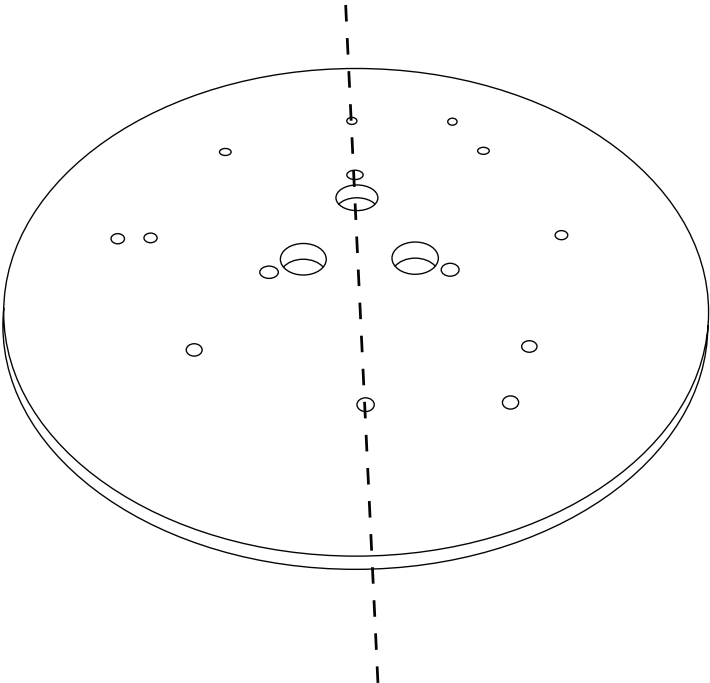
Upper grinding holder



Inner polycord holder



Inner grinding holder, polycord and upper grinding holder



Lower grinding holder

Maintenance

Daily:

- Clean the machine if it has been used for wet grinding or mist spray.
- Check wear on the tools – abnormal or uneven wear can indicate damage to the grinding holders.

Weekly:

- Clean the machine.
- Check the grinding holders. Remove the tools and run the machine off the ground on the lowest speed. If the grinding holders oscillate or wobble considerably they are damaged. Overhaul all grinding holders at the same time.
- Check that the upper belt is intact. Try to turn the large disk in any direction. It should be stiff. If it turns freely then the belt has broken.

Each month (or 100 hours):

- Clean the machine.
- Check the grinding holders.
- Screw into place everything that can have vibrated loose.
- Lift off the cover and check that it is intact.
- Scrape and vacuum the parts that are enclosed by the cover. Check the upper belt. Change as needed.
- Check the seals of the shafts the upper belt runs on. Change as needed. (On the HTC 800 models built after year 2000, only the shaft journal can be changed).
- Test run and listen for any sounds from the bearings.

Troubleshooting

Machine does not start:

- Emergency stop?
- Cable OK?
- Full voltage in all phases?
- Error message on the display?
- Cable OK?
- Speed setting? Not on the highest.

The machine shuts down often:

- Reduce speed.
- Error message on the display?
- Cable OK?
- Full voltage in all phases?

The machine sways or does not run smoothly on the floor.

- Check the grinding holders.
- Check the upper belt.
- Check the tools/wear.
- The screws that fasten the grinding head to the chassis may be too tight.

The tools wear unevenly (more than 3mm difference):

- Overhaul the grinding holders.

Electronic error codes - Hitachi

An error code is automatically displayed if a fault causes the frequency converter to trip out. The following list contains error codes and their possible causes. For resetting see page 45.

Error code	Explanation	Description of possible fault
E01	Overload during continuous operation	The most common codes in this category are E01 and E03. This error may arise in the event of momentary overload. This may be due to the machine being run too quickly or with a high load. Try reducing the speed, alleviating the load by moving the position of the weights and checking your tools. If the error is an E03, you can try starting the machine on another surface.
E02	Overload during retardation	See E01
E03	Overload during acceleration	See E01
E04	Overload at stationary position	See E01
E05	Overload	Occurs during prolonged overloads. If the overload lamp has been lit for a length of time, this will be the result when the electronics cannot handle the load any more. Drop the speed or reduce the load by adjusting the weights or tools.
E07	Overvoltage	May arise if there is a mechanical fault and the motor generates current back to the electronics. Check the mechanical functionality such as belts and bearings.
E08	EEPROM-error	Occurs rarely but may arise from high temperatures in the electrical housing. Open the housing and air out. Check filters and cooling fans in the housing.
E09	Undervoltage	Occurs if the voltage is too low. May occur where there are long cables or poor connections (contacts). May also arise if there are many users in the network. Try changing outlets, shortening cables and reducing speed.
E10	Current transformer interference	Contact service if this is the case. The internal transformer needs replacing.

Error code	Explanation	Description of possible fault
E11	Processor interference	The processor experiences interference, generates errors and needs to be reset. Comes from interference from the mains or other disruptive equipment. Try resetting the electronics by keeping the RESET button pressed for two seconds.
E13	Restart protection tripped	Operating fault when starting up the machine. Check the starting operation in the manual. The Start/Stop knob must be in the position "Stop" before the key is turned.
E14	Earth fault	Earth fault on motor side. May be due to jammed or damaged motor cable or motor breakdown. Check the motor and its connections.
E15	Overvoltage	If the mains voltage (volts) is higher than permitted, the converter is disconnected. Occurs rarely.
E16	Mains undervoltage	Main voltage (volts) is too low for the time being. May be due to lightning or a loose contact in the cables. Could occur if someone connected to the mains is using a powerful welder. Check the cables and connections.
E21	Overheating	Temperature too high in the electronics. See item E 08. May also be due to having poor mains voltage and the current being too high which generates heat in the electronics. Ventilate the cabinet and turn the machine off for a while with the door open.
E24	Phase fault	One of the incoming phases is missing. Check the fuses, cables and connections.
8888	Processor error	Contact service if this is the case. The converter must be reset.

Checking the latest error code - Hitachi

1. Press FUNC (D01 on the display)
2. Press the arrow up key until you come to D08.
3. Press FUNC and the error code appears on the display.
4. Press FUNC again and the relevant frequency is shown when an error occurs.
5. Press FUNC again and the motor current is shown when an error occurs.
6. Press FUNC again to view the voltage when an error occurs.
(Voltage on the DC bus)

To view previous errors, choose D09 which matches item 2 in the list above. For previous errors you cannot view data with respect to current or voltage.

Special tools

Special tools may be required to perform some repairs.

- Extractor for dismantling ball bearings

- Hydraulic press for mounting

- | | | |
|--|----------|--------|
| • Belt tensioning tool HTC 500 (ej hub) | article: | 110232 |
| • Belt tensioning tool HTC 650 (three grinding holders) | article: | 110231 |
| • Belt tensioning tool HTC 800 (models built before year 2000) | article: | 110230 |
| • Belt tensioning tool HTC 800 (models built after year 2000) | article: | 110634 |
| • Special tool hammer 500
To move the motor plate out of the centre position. | article: | 110212 |
| • Special tool hammer 650 and 800 (models built before year 2000)
To move the motor plate out of the centre position. | article: | 110213 |
| • Locating pin M6x70
To assist in closing the can | article: | 310050 |



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